# Drug & Cosmetic INDUSTRY

## JUNE, 1950

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THOMAS R. FARRELL, Editor
FRANCIS CHILSON, Production Consultant
MILTON A. LESSER, Technical Editor
HARRY G. KELBLY, Raw Material Editor
FRANK CHILD III, News Editor
HILDA C. McCOLLOM, Art Director



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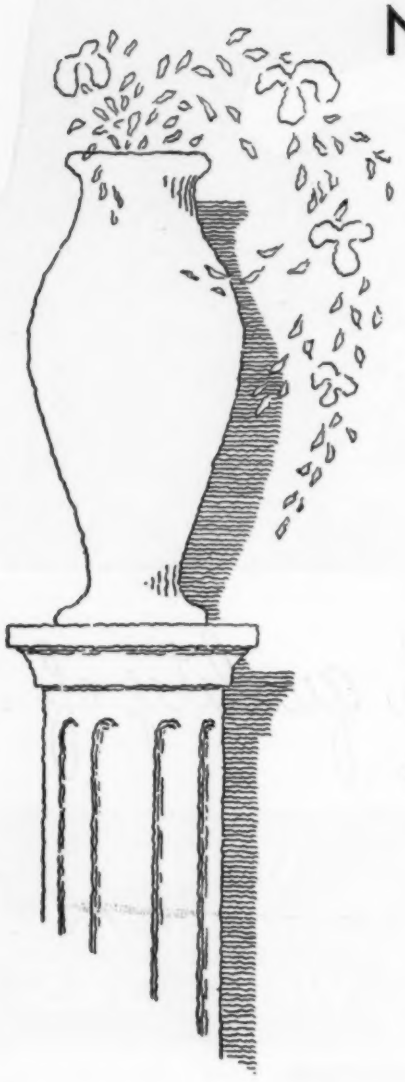

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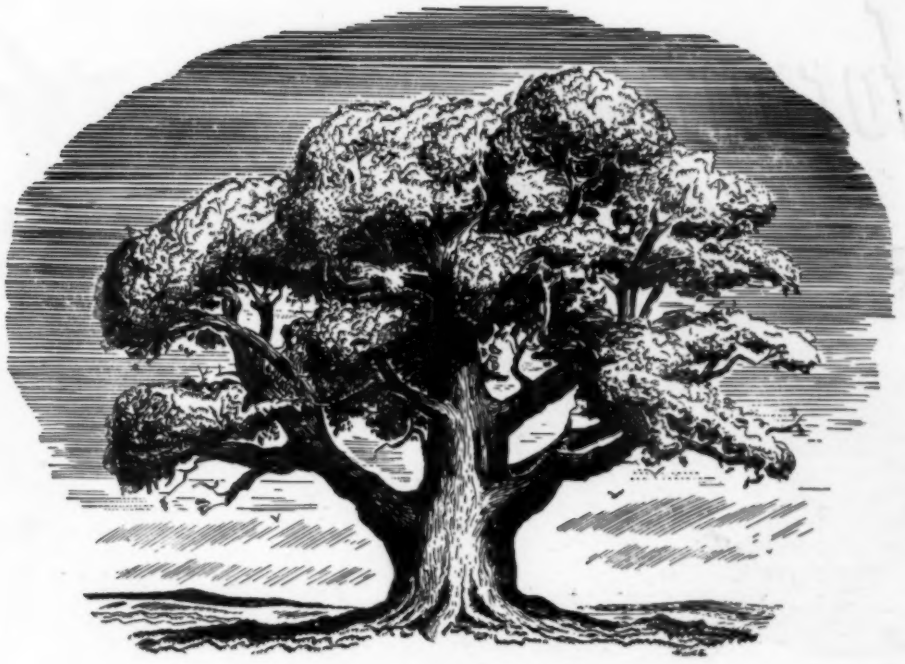

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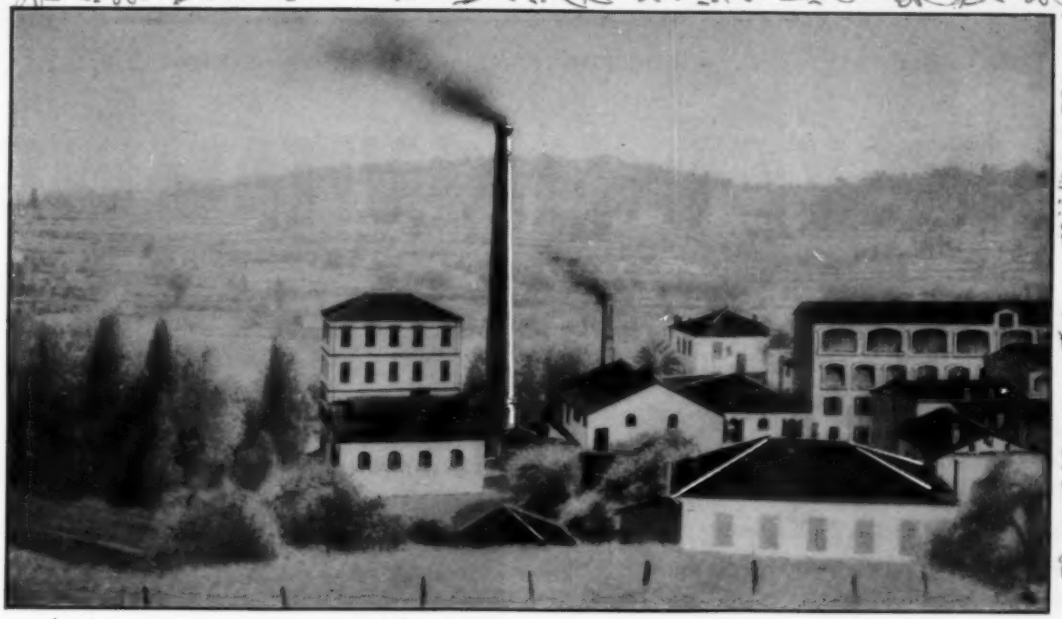

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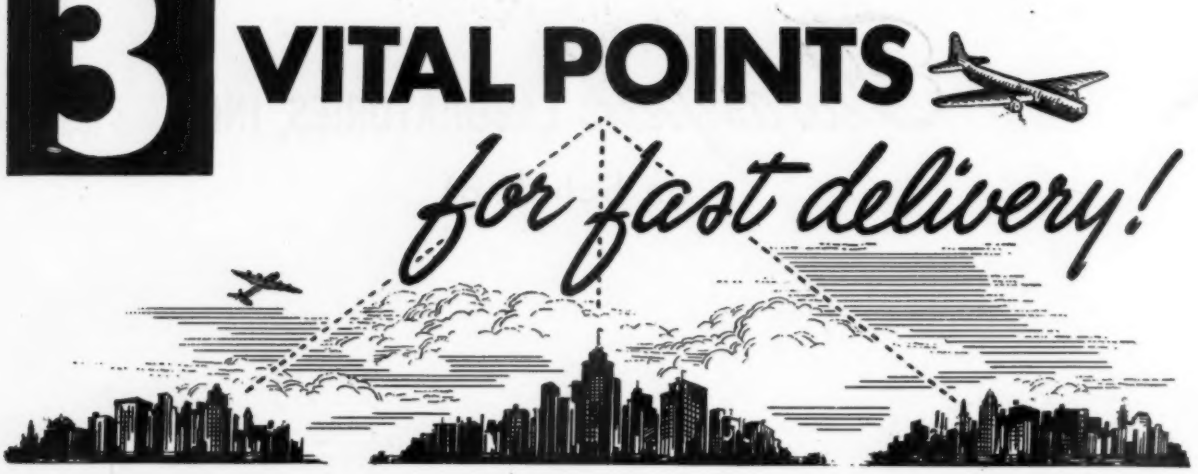

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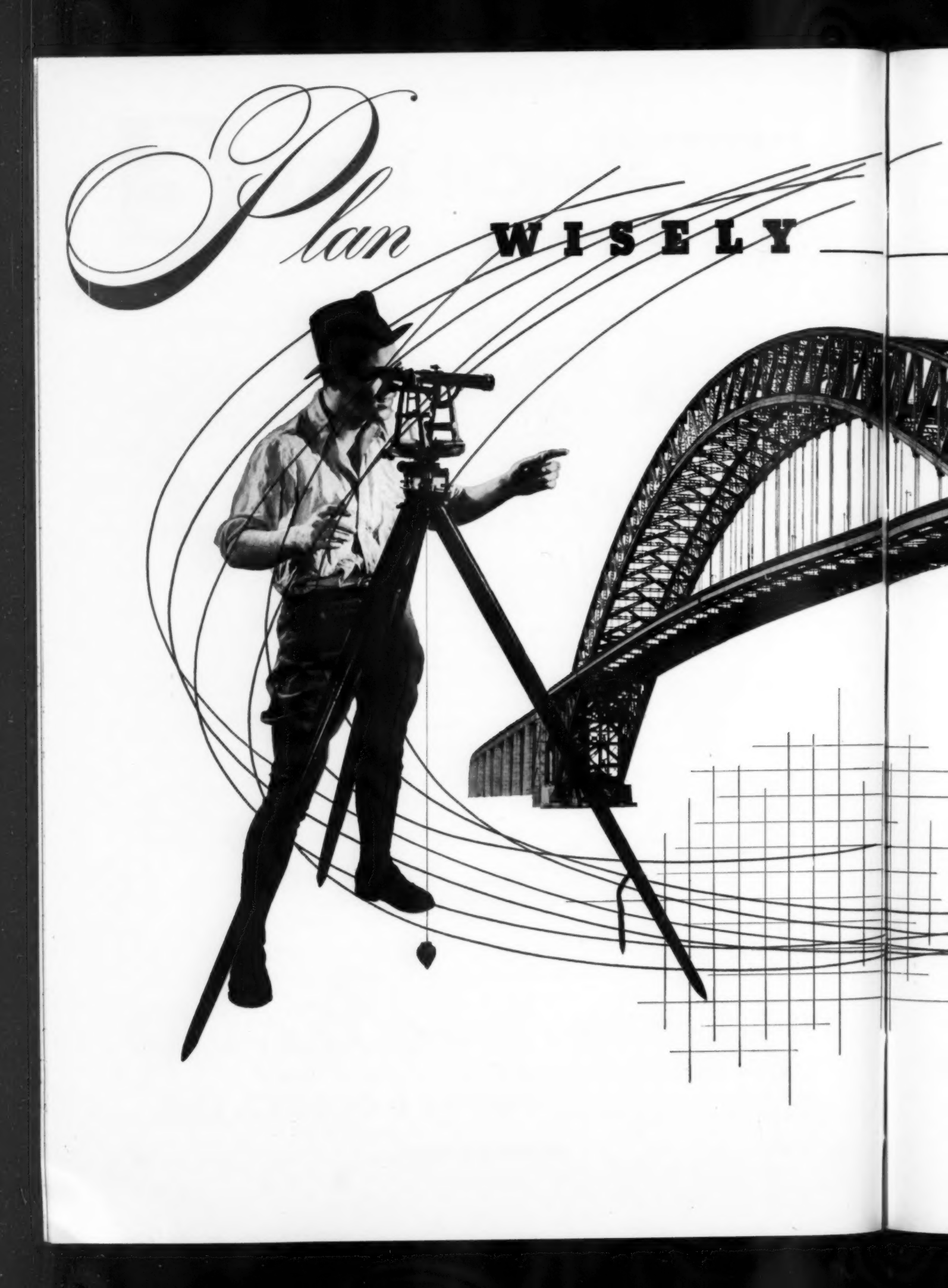
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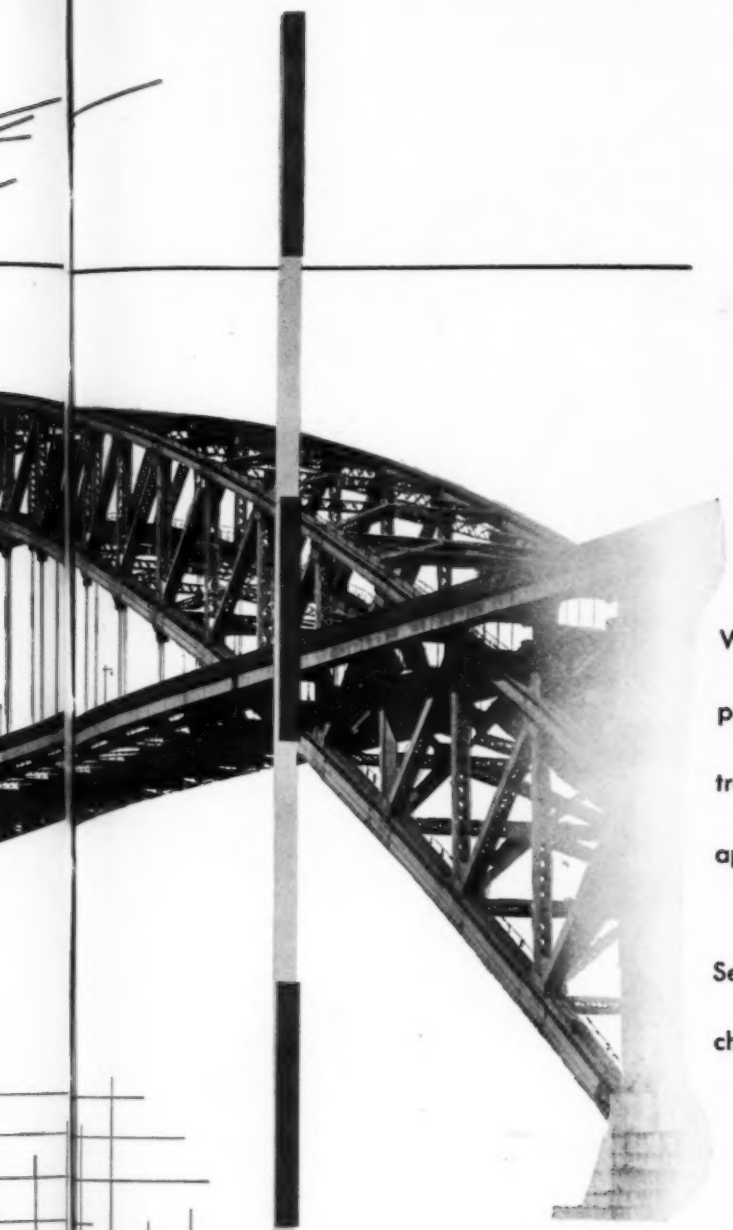

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**Wetzel, *et al.*, found "what may be termed $B_{12}$ functional deficiency, that was definitely benefited by oral therapy" with Crystalline Vitamin $B_{12}$. Over a 60-day period, the authors observed growth responses which were "equivalent to another 100–240 days of regular institutional care without the help of $B_{12}$." Besides growth improvement, the responding children showed increased physical vigor, alertness, better general behavior and greatly improved appetite. These data point the way to new lines of clinical investigation.**

[1]Wetzel, N. C., Fargo, W. C., Smith, I. H., and Heliksen, J.: *Growth failure in school children as associated with vitamin $B_{12}$ deficiency—response to oral therapy*, Science 110: 651-653, December 16, 1949.

*Your inquiries are cordially invited.*

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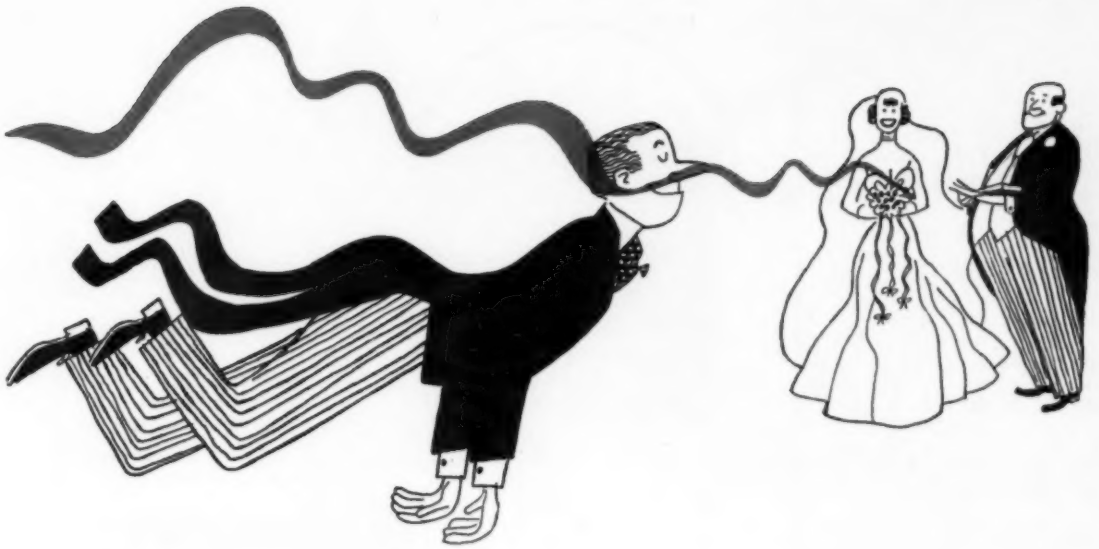

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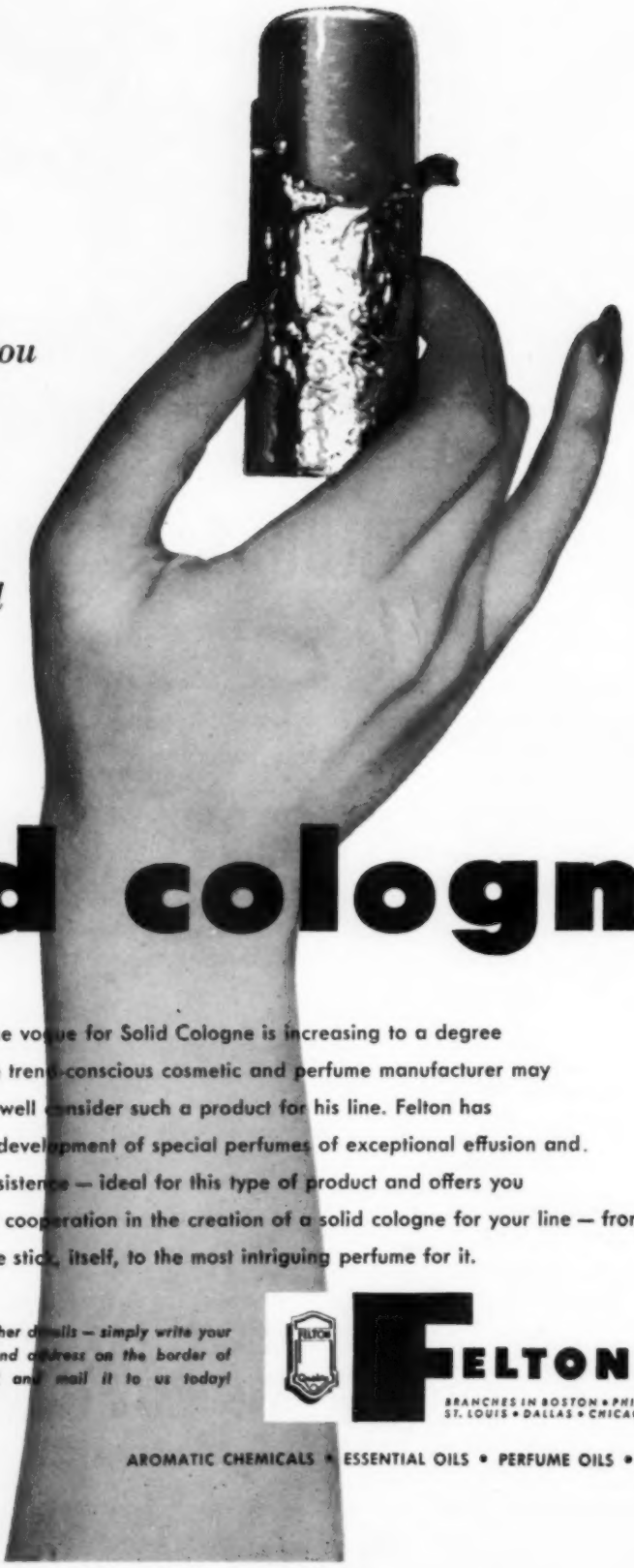

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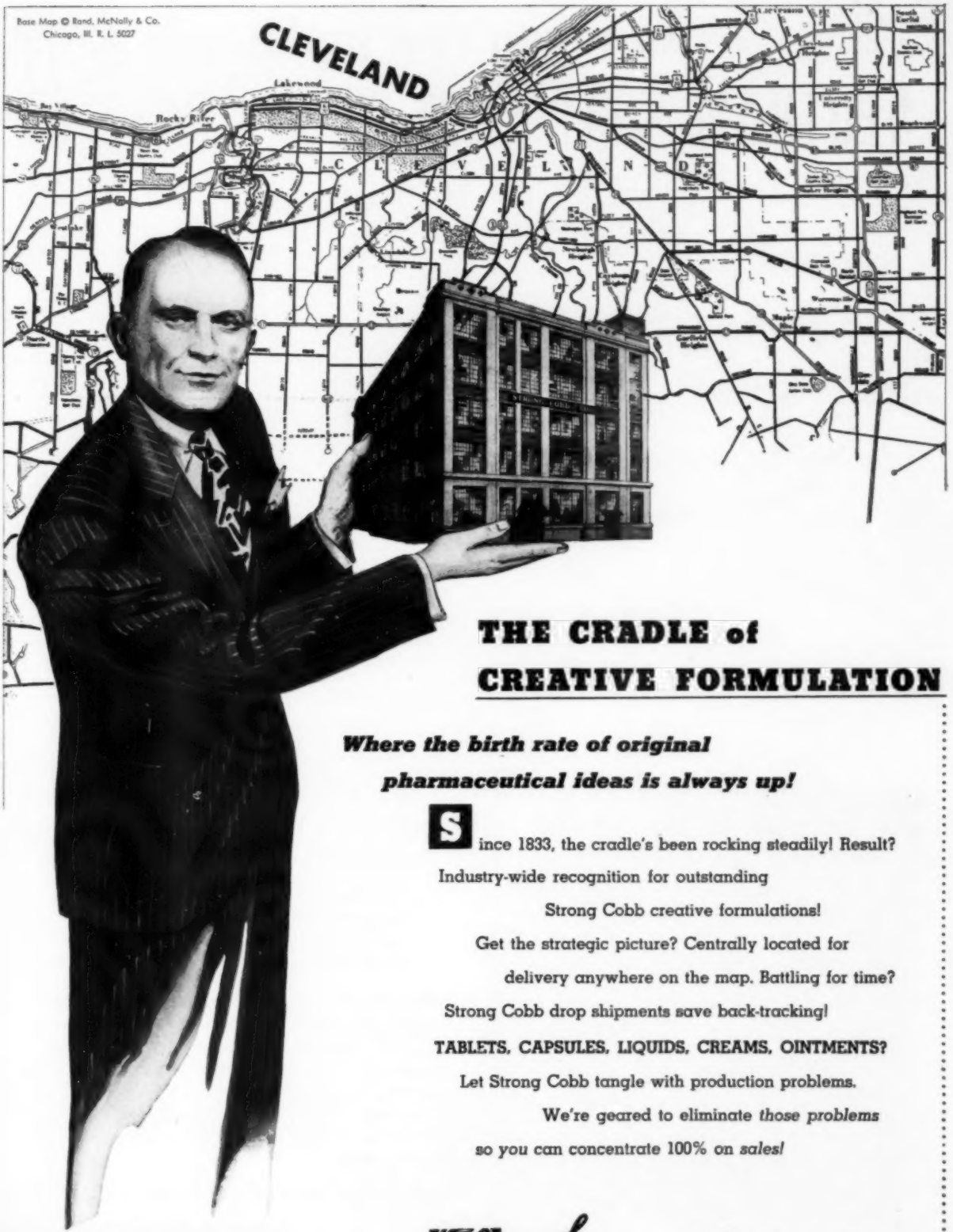


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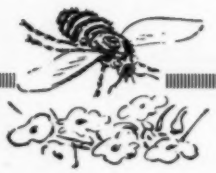

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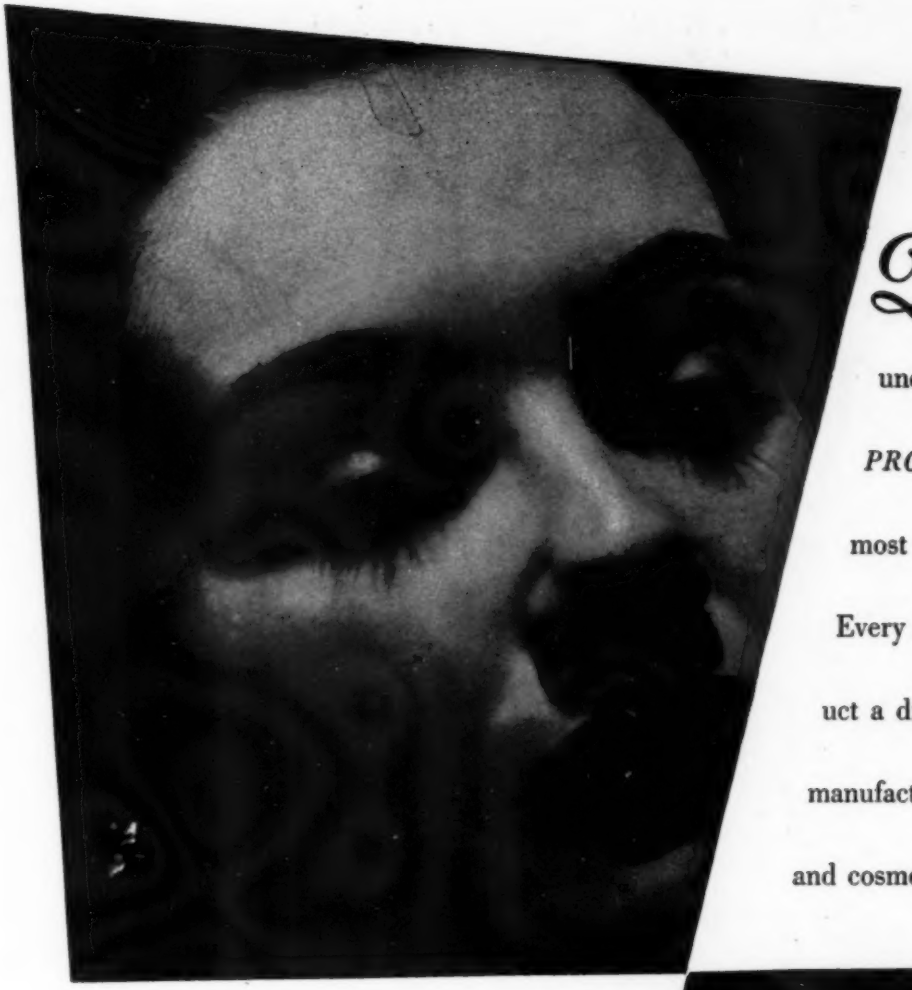

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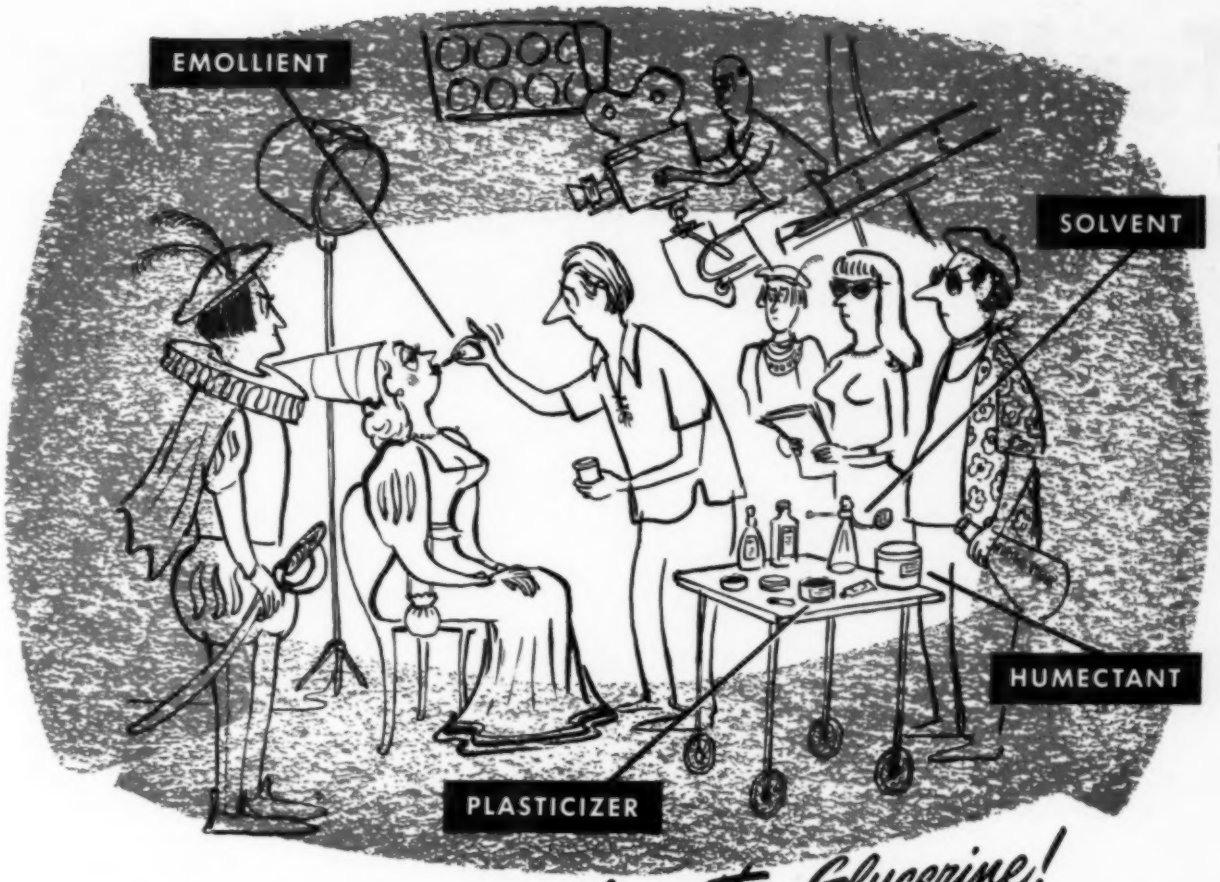


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**TOMORROW**—U.S.P. Glycerine will be called upon to perform a variety of tasks, often in a single cosmetic product. Not only because Glycerine improves the quality and performance of toiletries—but also because it exerts beneficial effects upon the skin! Indeed, a European survey has already indicated that there is *no* adequate substitute for Glycerine in cosmetic preparations. Glycerine—the time-tested component—is frequently a major ingredient in new compounds . . . for example in the insect-repellent cosmetics now undergoing extensive tests by the U. S. Bureau of Entomology and Plant Quarantine. A typical cream formula and condensed progress report on the subject will be sent on request. (Please use your company letterhead.) Here again, in cosmetics that are "news"—*nothing takes the place of Glycerine!*

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Practical experience proves that Beehive Brand Beeswax is more economical in the long run because it consistently produces emulsions that are stable and reliable under varying conditions of storage. We strongly recommend the use of the pure wax, though we are prepared to fill orders for beeswax compounds or synthetics, adjusted to the requirements of any manufacturer.

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# KEEPING POSTED

## Progress in ACTH

A FORM of ACTH 180 times more potent than the standard has now been produced, and isolation of an absolutely pure form of this hormone is predicted within the next few months. In addition, Armour and Company President F. W. Specht announces two new successful long-acting forms of ACTH. One of these, known as adactar, cuts the dosage from four times a day to one in two or three days in some cases. The second form, known as duractar, gives promise of a further reduction to one dose in five to seven days. With both new forms, somewhat larger doses are possible because of the slow absorption, but the general effect is to spread the available quantity of ACTH by at least five times.

Studies of the ACTH molecule indicate that it is a large one of a molecular weight of well over 10,000, which means that synthesis might be years away. The long-acting type will not only enable physicians to treat more patients with a given quantity of ACTH, but it will eliminate, through slow absorption, the jolt to the patient's system with the result that it will be safer and will not require close observation of the patient by the doctor. Mr. Specht says that the company "has high hopes of producing a preparation so safe that a patient can go into a doctor's office, get an injection and then go about his normal routine without being confined or hospitalized."

"ACTH can now be considered a very effective remedy in rheumatoid arthritis, gout, asthma and several other diseases," said Mr. Specht. "In some diseases ACTH in relatively small quantities has put patients back on their feet for an extended period and physicians have been able to keep the illness under control with other treatment."

## Health Foundation Plans

THE Health Information Foundation is to undertake an immediate program of study covering pilot surveys of community health facilities, multi-plastic screening experiments, voluntary prepayment insurance plans and the dissemination of information about basic health facilities. In announcing plans for study of Blue Cross, Blue Shield, and private insurance prepaid health care plans, H. I. F. President Blandy said:

"In this area of prepaid health, there promises to be an opportunity for the Foundation to make a significant contribution. A good deal is to be learned about these plans and a study made of their needs before we can intelligently map out a program of assistance."

## Fragrance Foundation Accomplishments

AT THE annual meeting of the Fragrance Foundation held last month, Retiring President J. S. Wiedhopf, president of Parfums Ciro, said: "In so short a time as one year, the dream of an industry-wide educational organization is well on its way to becoming true. The work of educating the consumer in the proper use and enjoyment of fragrance products is a duty which rests squarely on the shoulders of all of us. The consumer is entitled to know the most effective means of obtaining the satisfaction and stimulation our products can afford her."

Foundation Coordinator Miriam Gibson French said that educational information on fragrance products has gone to the public through the press, including newspapers, syndicated columns, consumer magazines, trade publications, and radio, reporting that in eleven months, this information received a circulation of nearly four times the goal set. She announced that an organization along the same lines as the Foundation in this country, has been formed in England, under the name of the Fragrance Bureau. "Surely this is conclusive proof that the power of our work is spreading to places far beyond the limitations of our own shores," she said.

## Antibiotic Expenditures

ONE dollar out of every four spent in 1950 for prescription drugs will be for antibiotics, Pfizer President John E. McKeen recently told the Chicago Investment Analysts' Association. "Antibiotics now represent by all odds the largest single item in the entire ethical line, exceeding in value even such items as ethical vitamins," he said. "In 1949, antibiotics accounted for 22 per cent of the total value of all ethical drugs manufactured, and in 1948, the New York Department of Hospitals spent nearly one-half of its total budget on penicillin and streptomycin alone, added Mr. McKeen.

### Ebert Medal to Dr. Blythe

THE Ebert Medal—top award of the American Pharmaceutical Association for scientific research—was awarded this year to Dr. Rudolph H. Blythe, of Smith, Kline & French Laboratories, for original research in testing bulk laxatives. Dr. Blythe devised a method of evaluating water-retaining properties of bulk laxatives which simulated conditions in the intestines by making use of an artificial cellophane-type membrane. The substance being tested was placed in an artificial intestinal fluid; the resulting gel was placed on one side of the membrane. On the other side was a hypertonic solution (which draws water). The amount of water withdrawn from the test material through the membrane was measured. The goal is a substance which will retain water, instead of letting it be absorbed by the body, thus producing a laxative effect. This research indicated the superiority of certain synthetic agents, particularly sodium carboxymethylcellulose, over natural gum substances which at present are the standard bulk laxatives.

The A. Ph. A. also honored two SKF research scientists who co-authored Dr. Blythe's prize-winning paper. Thus certificates of merit were presented to Dr. Harlan H. Tuthill, SKF Plant Technical Director, and John J. Gulesich, a senior pharmaceutical chemist at SKF.

### A. Ph. A. Advances

MANY recommendations were made by A. Ph. A. President Dr. Glenn L. Jenkins, Dean, School of Pharmacy, Purdue University in his address to the recent convention of the Association, and these were acted upon in the form of resolutions. One of the needs of the Association brought up for consideration is additional building facilities for headquarters activities in Washington. A program to secure funds for this purpose is being initiated, the program to reach completion by the end of 1952. While membership is at an all-time high, it is still far below what it should be. Therefore, the Association will engage an additional member of the Washington staff at an expense of $15,000, this new staff member to have the prime responsibility of stimulating increased membership through work with local and student branches and other organizations.

An up-to-date reference book for pharmacists is also to be investigated, such a book to be patterned after the British Pharmaceutical Codex, prepared by experts with the assistance of committees of specialists, and containing details of action, uses, and methods of administration of both old and new drugs.

The establishment of a section of the Association for professional service representatives, or detail men of manufacturers is to be investigated. This is based upon the statement of Dr. Edward C. Elliott, who conducted the Pharmaceutical Survey, that these men have become the most important men in American medicine and pharmacy. Since a large number of them are organized in State Associations, it is believed to be desirable so that they have a national organization through a section of the A. Ph. A. Thus they could discuss their mutual problems as well as problems related to other divisions of the professional aspects of pharmacy.

A resolution was adopted calling on manufacturers of "specialty products and so-called tailor-made prescriptions" to make available the basic ingredient for compounding and dispensing by the practicing pharmacist. It is said that present practices prevent physicians from varying the dosage in accordance with the needs of the patient and prevent the pharmacist from compounding the forms of medication most suitable in the treatment of disease. The Association would like these ingredients available in bulk. This of course would greatly add to the danger of substitution, already a serious problem. Doubtless, such a method of distribution would force the manufacturer to invest heavily in a staff to detect such substitution, much after the manner of the makers of Mercurochrome some years back.

A new planning body for pharmacy is to be investigated so that intraprofessional relations might be improved.

### Doubling the Life Span

HAVING recently read that Arturo Toscanini, age 83, has signed a new ten-year contract with RCA, we were particularly interested to learn that within the next ten years, if a fund of only $3 million were available for research in the field of gerontotherapeutics which would slow down the aging process in human beings, the life span could be doubled. This is what Dr. Thomas S. Gardner of Nutley, N. J. recently told the members of Passaic Valley Section of the A.C.S. "The Potential life span has not been approached," he said. "If there is no change in the rate of growing old, but utilizing the organs to a maximum, the average life span should be about 120 years. However, if the rate of growing old can be reduced, the average life span increases accordingly."

The major cause of death, he said, was the breakdown of cardiovascular system, "and here a primary factor is the disposition of cholesterol in the blood vessels, heart, muscles, and other organs. Research has indicated that this can be prevented by the use of so-called lipotropic factors such as choline and inositol, but further study is required to determine the best dosages for human beings of different ages."

Dr. Gardner said that he had increased the life span of fruit flies by 46 per cent through the use of pantothenic acid, pyridoxine and sodium yeast nucleate. (We don't know what the fruit growers think of this.)

### The Sixteen Oldest Drug Houses

WE ARE informed that still another drug manufacturing establishment must be added to our list of early drug manufacturers in this country. The company to be added is Wyeth, Inc., which by its predecessors in business dates back to 1860, and therefore is tied for ninth place with Reed & Carnrick, who started all this. Now the list, starting with Schieffelin, and ending with Lilly, becomes *sixteen* in number:

| | |
|---|---|
| Schieffelin & Company | 1781 |
| The Tilden Company | 1824 |
| The Wm. S. Merrell Company | 1828 |
| Otis Clapp & Son | 1840 |
| Smith, Kline & French | 1841 |
| Carroll Dunham Smith Pharmacal Co. | 1844 |
| Sharp & Dohme | 1845 |
| E. R. Squibb & Sons | 1858 |
| Reed & Carnrick | 1860 |
| Wyeth, Inc. | 1860 |
| The Burroughs Bros. Mfg. Co. | 1863 |
| Buffington's | 1865 |
| Parke, Davis & Company | 1866 |
| Henry K. Wampole & Co. | 1872 |
| The Maltine Company | 1875 |
| Eli Lilly & Company | 1876 |

## Medical Testimony

WITH reference to the use of testimonials in advertising of drug preparations, the following part of the charge to a jury by a Federal Judge in a case brought by the Food and Drug Administration is interesting:

"Lay persons may properly testify to symptoms such as pains, aches, itching, stiffness or fatigue which they personally experience or conditions such as swelling discoloration, cuts, abrasions of the skin, which they are able to see. They may testify to the taking of medication or other types of treatment taken in connection with whatever they may be suffering from or afflicted with. They may properly testify to any alterations of these symptoms or conditions subsequent to resort to the medication or treatment. Any testimony, or suggestions by such lay persons that improvement or aggravation of such symptoms or conditions was brought about by the use of any particular medication or treatment should be disregarded by you since such persons are not competent or qualified to determine the cause of benefit or improvement in physical condition.

"You are . . . to disregard that testimony of any lay witness in which that person stated that he or she was being treated for any particular disease. A lay person is not competent so to testify. Anything that a doctor told a person is hearsay. The doctor is the only qualified person to testify concerning the disease present and the reasons for resort to treatment prescribed. Although a lay person is competent to testify to a change in recognizable symptoms, a doctor is the only qualified person to testify as to whether or not a cure has been effected, or any particular type of medication or treatment was effective in bringing about a cure or an alleviation of the ailment. The proneness of lay persons to err in accrediting responsibility for benefits to health is well understood. The nature of the simplest disease is so obscure to a lay man that his conclusions touching what will benefit it and not benefit it mean little."

The Judge also defined "False and misleading" in the following part of his charge:

"You are instructed that, as used in the Federal Food, Drug, and Cosmetic Act, the word 'false' applies to any representation or suggestion which is inaccurate, incorrect, untrue, or an erroneous statement of fact. You are instructed that the word 'misleading' as used in the Act applies to any written, printed, or graphic matter which misleads or deceives, or has a tendency to lead into error, to lead astray, or to lead into the wrong path. You are further instructed that deception may result from the use of statements not technically false or which may be literally true. The aim of the Act is as much to prevent deception which may result from indirection and ambiguity, as well as from statements or representations which are false. You are further instructed that it is not difficult to choose statements, representations, pictures, symbols, or slogans which will not deceive, and those which are ambiguous and liable to deceive should be read favorably to the accomplishment of the purpose of the Act, namely the protection of the purchasing public and the public health. Statements that are ambiguous and liable to mislead, or which create or lead to false impressions in the mind of the reader, are misleading within the meaning of the law. In determining whether the labeling involved is false or misleading for any of the reasons claimed, you will consider whether the statements complained of are likely to create a false or misleading impression in the mind of any person who reads such statements pertaining to the claims made for the devices involved in this case."

## Flavor and Perfume Materials Output

TOTAL output of flavor and perfume materials in 1949 was 23.4 million pounds, an increase of 5.4 per cent from the 22.2 million pounds produced in 1948, according to the U. S. Tariff Commission. Sales in 1949 totaled 19.9 pounds, valued at $28.7 million, compared with 19 million pounds, valued at 26.7 million, in 1948, an increase of 4.6 per cent in quantity and 7.5 per cent in value.

Production of cyclic flavor and perfume materials in 1949 amounted to 15.3 million pounds, less than 1 per cent below the 15.4 million pounds reported for 1948. Sales of cyclic products (which include courmarin, menthol, methyl salicylate, and vanillin) in 1949 were 12.6 million pounds, valued at $17.4 million, compared with 12.5 million pounds, valued at $16.7 million in 1948.

Production of acrylic flavor and perfume materials in 1949 totaled 8.1 million pounds, or 20 per cent more than the 6.7 million pound total reported for 1948. One flavoring material alone made up the bulk of this total, monosodium glutamate being produced to the extent of 7.6 million pounds. Sales of acrylic material in 1949 totaled 7.3 million pounds, valued at $11.3 million, compared with 6.5 million pounds, valued at $10 million dollars in 1948.

## The Medical Profession and Antihistamines

THE A. M. A. and the medical profession generally appear to be undertaking a concerted effort to kick the stuffings out of antihistamines for self-medication of colds. The job they are doing is so thorough and apparently so well organized that it really gives anyone acquainted with these activities of organized or political medical practitioners, the feeling that there really must be some benefit to be derived from taking antihistamines to ward off or lessen the effects of a cold. Much as we would like to believe so, we are certain in our own minds that this work is not being performed for the public weal. Rather is it a determined effort on the part of the medical profession to break down completely any new product which dares to by-pass them. Furthermore, they are determined not to let self-medication spread to new or old diseases through the use of new discoveries on the part of drug manufacturers.

One has only to look back at the persistent job which they performed over many years on self-medication by vitamin preparations advertised directly to the public to know what they are up to in this instance. While continuing to prescribe vitamin preparations of one sort or another—generally in insufficient dosage and many times not the correct vitamins for the condition—they continued to appear in magazines and newspapers as condeming the use of vitamins by the public. Only when practically all of the advertised brands gave up the ghost, did they cease firing. Now they are in a position to dictate to people what vitamins they should take since the public can not learn through advertising.

The medical profession well knows that the antihistaminics are one of the few important groups of drugs of the present and more so of the future. They are using them now in a rather limited way, but they know that they will be using them in increasing amounts as time goes on. These products will be used in the treatment of many different conditions. Therefore, they are not going to let public sale and public acceptance of these products get a toe-hold if they can help it. Who knows how far the average individual will stray from the doctor's office if he is able to alleviate many conditions through the use of these tablets which he can buy over the counter?

Therefore, the thing to do is to make the public uncertain as to the benefits of these products—just as the medical profession did with vitamins—and throw into the public as much of a scare regarding their "indiscriminate" use as possible. And the easiest way to attack these products is through their claims for colds since no one—not even a doctor—can truly diagnose an incipient cold, and the public thinks more about preventing a cold then almost anything else. So you manufacturers of antihistaminics, watch out, you're in for a tough battle for these birds do not give up easily.

### Evans on Cosmetics

SYNTHETIC surface-active agents have caused the most profound change in cosmetic compositions, Dr. Ralph L. Evans, of Evans Research and Development Corporation, told the American Institute of Chemists last month. "Originally offered as soap substitutes, these materials have proved to be far more versatile and effective than simple soaps for almost all uses. Soapless shampoos have replaced soaps. Synthetic emulsifiers dominate their field; indeed, in the low pH ranges, they are about the only ones in general use. Dispersing agents, clouding agents, suspending agents, thickeners, and thinners are all represented in this general group. Such synthetics have become the most important family of cosmetic raw materials. They have made the fats, oils, and emollients far more effective for old uses and valuable for totally new ones. Their number, composition, and range are constantly increasing and their total contribution is expanding almost logarithmically."

"Although earlier work in the cosmetic field emphasized preparations for the skin," said Dr. Evans, "the market for the last four years undoubtedly has accented preparations for the hair. Such preparations include color rinses, dyes and tints, grooming agents, and, most important, permanent waving solutions, shampoos, and cream rinses.

"As for inhibitions against the use of cosmetics, these are more important for men than for women, but they exist for both. Fear of ridicule is one of the greatest of all personal fears.

"Among women's cosmetics, the most neglected include tints and dyes for hair. 'She dyes her hair' has for so long been an expression of ridicule, that women over forty are afraid to recolor their hair already gray. It is safe to say that not ten per cent of the women of America recolor their hair when it turns gray. A greater proportion of younger ones would like to change their hair color from what it is to something new. It is remarkable that more than half the women of the country will have a permanent wave but so few will dare to use a hair dye.

"And what about hair dyeing? Can we predict continued supply of melanine after forty? Not as yet—we know a little more about the nature of melanine as a pigment and its relationship tyrosin and dihydroxyphenylalanine, but how and why it is segregated by the papilla and fed to the hair shaft is still a mystery. Yes, we probably have an oxidation and a condensation. Perhaps a peroxide promotes formation of a free radical, which leads to polymerization and formulation of insoluble pigment. But to color hair this way? Not yet, but work is being done. Meanwhile we must still depend upon coal-tar derivatives, especially phenylene diamines and related products, intermediates of small molecular size, which, when oxidized, condense (or polymerize) with themselves or with secondary acceptors like phenols or anilines to form insoluble color bases that may be chemically combined with keratin. How will we use our newly-acquired knowledge of the effects of reducing agents, especially mercaptans, on the hair? We now know how to change the shape of the hair or even peptize it to destruction. Can we use the same key to unlock the door to better hair coloring? Can we use it to expand the interlattice dimensions so that still larger color-bearing molecules can be made to enter the keratin structure? Will these techniques permit us to color hair quickly in the cold as we now dye wool in the hot, using acid dyes? Or maybe vats?

"By 1915, the permanent wave, reduced in price, had arrived in America. In 1944, 30 to 35 million permanent waves were given in the United States. In 1949, 50 to 60 million waves were given in the United States; over 40 million of these were cold waves, of which about 25 million or more were given at home. Can we predict more progress for permanent waving? Yes—larger markets, more users, simpler techniques, more fool-proof products and processes, better raw materials, and less hair damage resulting from the process.

"The ultimate in permanent waving will become a fact when the follicle within the skin can be reshaped to impart, the desired curvature to growing hair. No method now used even contemplates this effect.

"Can we stop falling hair? Not yet as a practical commercial matter, but some work indicates promising directions for progress. More knowledge of hair growth has been gathered from the field of breeding fur-bearers than from human beings, but can we eliminate baldness? —Not yet. Contributing factors are believed to include infections of the scalp and follicles, restricted circulation, hormone imbalance, and diet. Are these all of the causes? Probably not.

"And if we can cause hair to grow on bald heads, can we cause it not to grow on grizzly faces? Or can we cause it not to grow upon and shadow milady's upper lip? It has been said that if men could convert their bewhiskered faces to beardless ones they would prefer not to do so, fearing to be charged with loss of masculinity.

"Lipsticks continue to depend largely on wax-supported suspensions of colors in oil. The most important class of colors is still the fluorescein group. Certainly permanency in lipsticks is still a matter of improving the performance of water solubles like brom-acid, rather than using new, novel or revolutionary dyestuffs. And consistency is of prime importance. Lipsticks that please some are too dry for others or bleed badly for a third group. What is needed is a temperature and moisture insensitive base that will act much as do the silicones, which give us lubricants of constant viscosity with changing temperature. Perhaps odor-flavor of lipsticks is a criterion of choice more important than the performance of the color.

"Although tooth preparations have ranked next to soap and cleansers as the greatest volume group of cosmetic products, the recent flurries of excitement over the use of fluorides and of ammoniated cleansers have proved that even here, products and practices are not yet stabilized. It seems safe to predict development of improved products and improved methods of use. Perhaps more color factors can be introduced. Today, one maker offers to heighten color of the gums; tomorrow, another may incorporate 'brighteners' to whiten and brighten the teeth. Perhaps means will be found to adsorb upon the tooth surface very thin layers of protecting films that will effectively combat caries, or perhaps harden the cusps (as fluorides are said to do), or inhibit the growth of acid-forming organisms, or heighten the sparkle by inclusion of 'brighteners.'

"During the last twenty years antiperspirants have become very popular, even with men, and as better products today do not destroy or carbonize cotton fabrics, especially men's shirts, their use is expected to become as prevalent and regular as shaving. Antiperspirants suppress perspiration and, as with deodorants, discourage growth of fermenting bacteria, yeasts, and similar odor producing organisms. A further extension of this method growth-suppressing agents for general body cleansers, especially the use of quaternary ammonium compounds and of certain phenols that are claimed to be effective at the pH of soap and are said to be left on the skin by the user. As such additives are not irritating to the skin, they may be used regularly, incorporated into toilet cleansers or lotions or bath soaps."

### FTC Hits More Antihistamines

SINCE we last reported on the activities of the Federal Trade Commission concerning advertising of antihistaminics for the treatment of colds, two more companies have been cited. The Whitehall Pharmacal Company (American Home Products subsidiary) has been charged with false and misleading advertising of Kriptin, and Union Pharmacal Co. (Schering Corporation subsidiary) has been charged with false and misleading advertising of Inhiston. These two preparations contain two different antihistaminics, while the first two cited by the Commission—Ahahist and Resistabs—contained a third antihistaminic. Therefore, the charges are now pending against claims made for three different types of products although four manufacturers of tablets are involved.

### Passano Award to Kendall and Hench

DR. EDWARD C. Kendall and Dr. Philip S. Hench, both of the Mayo Clinic, Rochester, Minn., are receivng the $5,000 cash award for 1950 of the Passano Foundation for their studies in clinical physiology as related to the administration of cortisone and related hormones. The award, which is only the second joint award of the Foundation, will be conferred June 28 in San Francisco, for the chemical investigation of the adrenal cortical hormones, the development of cortisone and its clinical applications to rheumatic diseases, The Passano Foundation was established in 1943 by the Williams & Wilkins Company, medical publishers. to aid research.

### F. T. C. Reorganization

THE Federal Trade Commission has reorganized its bureaus and divisions and its appointment of supervisory officials, effective June 1. The Commission gives the following reasons for the changes:

1. To eliminate delay in the handling of cases.
2. To promote the development of its cooperative work with industry.
3. To relate its investigations of complaints with the trial work which may develop therefrom so as to eliminate waste of effort and cost in litigated matters.
4. To associate its economic investigations with the preparation and trial of cases so that conditions which encourage monopolistic development and practices will be treated in their incipiency.

D. C. (Scott) Daniel continues as secretary and executive director of the Commission and director of the Bureau of Administration, continues in this post and no changes are contemplated in the personnel of this bureau.

William T. Kelley continues as general counsel of the Commission. The Commission describes him as a "veteran of the Commission and recognized as an able authority in these general fields." He will continue to have the same legal assistants.

Henry Miller, who is familiar to this industry since he conducted the cosmetic industry conference and the subsequent hearings on a code of Fair Trade Practices, is advanced to Associate General Counsel in charge of all legal questions relative to the cooperative (trade practice code) work of the Commission. The Commission states that this work "has suffered, at times, because the Commission has not had the services of someone specifically designated in the General Counsel's Office who is intimately familiar with all the related legal problems. Mr. Miller is an authority on these problems. We believe his appointment as the Associate General Counsel in charge of all legal problems of this character and relieving him of the numerous administrative duties will advance the cooperative program."

James A. Horton has been placed in charge of the Bureau of Industry Cooperation (Fair Trade Practices codes). P. B. Morehouse, formerly Director of the Bureau of Stipulations, will be Mr. Horton's associate. "In large degree this is still the pioneering bureau of the Commission's work," says the Commission. "Mr. Horton and Mr. Morehouse have demonstrated their administrative ability. They have an outstanding opportunity. The Commission is encouraged by the increased interest on the part of industry to cooperate in wiping out unfair and deceptive trade practices and in developing programs which will be in the interest of, and will be approved by consumers. This work will be watched closely by the Commission. With Mr. Miller free to devote his abilities to the legal problems, and Mr. Horton and Mr. Morehouse in charge of the bureau, the Commission hopes to further this work so that it will continue to have the enthusiastic support of the Congress and the President, as well as of consumers and small business."

The Bureau of Restraint of Trade has been created to receive all anti-monopoly work. Joseph E. Sheey has been named director of this bureau, and Everette MacIntyre Associate Director. The Commission states that "heretofore the investigation of complaints to develop facts upon which charges were brought has been too much separated from the trial of cases. The investigation of anti-monopoly cases will now be coordinated with the trial of these cases."

Dr. Corwin D. Edwards, described by the Commission as "a recognized authority in the field of economics," will continue as director of the Bureau of Industrial Economics with the same staff or assistants.

Richard P. Whitely will direct the Bureau of Deceptive Practices. He was formerly director of the Bureau of Litigation. His assistants and chiefs of various divisions will be men long associated with that work.

Everett F. Harcraft has been appointed Director of Trial Examiners, effective June 30, with Abner E. Lipscomb as his associate.

Supervision of the various bureaus by the Commissioners is as follows:

The Chairman of the Commission will have supervision over the Bureau of Administration and over the Trial Examiners.

Commissioner Ayres will have supervision over the General Counsel's Office.

Commissioner Carson will have supervision over the Bureau of Restraint of Trade and the Bureau of Industrial Economics.

Commissioner Mead will have supervision over the Bureau of Industry Cooperation and the Bureau of Deceptive Practices.

# EXPLOSIVE SELF-SERVICE

*By Frazer V. Sinclair*

THIS new half-century may well be called the age of distribution. It will be a long overdue age when it comes, because the increasing cost of distribution over the last generation has steadily chewed away a large part of the savings resulting from increasing factory efficiency. Now we are told that about the best we can expect from the factory is a cost reduction of two per cent a year. It would seem that it is now the turn of distribution to yield savings that will continue America's proud record of continuous cost reduction in consumer goods.

In one part of the broad field of distribution things are certainly happening that point to eventual cost reduction. That part is retailing. With growing frequency we hear the word revolution used to describe the changes that are daily taking place here. These retail changes are many, but basically they include;—the growing elimination of personal selling; the growing elimination of single trade or specialty line stores; concentration into super-markets for volume operations and the trend by retailing to escape from congested traffic centers.

Perhaps more than anything else, the change from personal selling in the retail store to the open display which invites the customer to help herself is arousing speculation, hopes and fears. Many prominent business men, economists and professors have had their say on this subject and made their prophecy. Probably the most emphatic has been Professor Malcolm P. McNair of the Harvard Graduate School of Business Administration. In a recent speech he said, "The department store of the future will be operated like a supermarket on a self-service plan. Instead of the familiar rows of salesgirls there will be rows of open fixtures to show the full range of stocks to advantage with attractive packaging. A few customer advisers or sales hostesses will be scattered about the floor. When you've selected the items you want, you take them to the service desk, pay your bill or have it charged and you are on your way in quick time."

"It's an outworn myth," he said, "that all women look on shopping as a major sport to be indulged in as often and as long as possible. I am convinced that the sales counter with a row of sales people, all at fixed stations behind the counter, is today entirely obsolete."

Note that in this statement it is the department store, the perhaps last bulwark of personal selling, the dispenser of the widest variety of consumer goods that is selected to emphasize the dynamic surge of self-service selling.

We have had self-service in retailing in this country for over thirty years. It is remarkable that the social changes of these thirty years have not forced this issue —personal selling versus self-service—into an open, national retail issue before this  Consider what has happened during these thirty years:

Large manufacturers have acquired the ability to reach quickly and simultaneously into many millions of homes—fourty million or more—with a vivid, persuasive sales story. They have long had newspapers, magazines and radio. Now the vivid personality of the salesman is entering the home via television.

This has been a period of miraculous development in packaging. We can package practically anything the consumer uses—automatically, cheaply. We are in an era when nearly everything the consumer buys will be packaged at the factory. The package represents a known name, full of information and instructions, a known quality, quantity or what you want, waiting to be picked up and taken home.

Americans are more and more being conditioned to uniform standards. Mass production, mass advertising, mass marketing all work in that direction. Customer convenience is more than just a luxury the smart retailer extends with an indulgent smile. American women, in increasing numbers, are employed in factories, offices and services. An increasing percentage of female workers are married. Quick convenience in shopping is a simple need for most of them.

Self-service in retail stores is expanding dynamically because it brings lower operating costs. But it couldn't expand if customers didn't like it.

How far and in what direction self-service, with the super-market formula that usually accompanies it, will go is the question that many manufacturers and retailers must question with growing concern.

The retailers' concern must be based upon increasing evidence of customer approval of open display and self-service; increasing and startling evidence that without the interception of personal selling the large increase in impulse or unplanned purchasing increases total volume sales; plenty of evidence that partly as a result of this increased volume per square foot of selling space costs are dropping.

Retail costs have been stretching upward at an alarming figure over the last ten years. The tremendous increase in consumer purchasing power and the resulting increase in retail volume is the only thing that has saved the day for many retailers. Even with this new volume some classes of retailers, notably the department store, have had to delegate some retail functions and costs, such as sales clerks salaries, or partial salaries, advertising, etc. to the manufacturer.

In view of this patchwork of retail costs, what must happen to the sale of many staples in this new era of retail competition with a return to a full buyer's market. Consider the comparison of retail operating costs given recently by a speaker at a trade convention. A pair of nylon hosiery, for example, with a wholesale price of 50 cents would have to be sold at the following prices, depending on the mark-up established in each particular store. Florist, $1.23; Bakery, $1.12; Jeweler, $1.01; Fur Shop, $1.00; Radio Store, $.92; Furniture Store, $.89; Gift Shop, $.88, Department Store, $.79; Variety Store, $.74; Drug Store, $.73; Grocery $.62.

We do not have the figure for the chain grocery super-market and it would be particularly interesting to know the mark-up at Filene's new fully automatic dispensing machine store in Boston's Greyhound Bus Terminal where packaged hosiery is reported for sale.

Manufacturers, except those with heavily advertised, mass distributed convenience or utility products, may well face a troublesome decision as self-service expands and as new forms of retailing, such as the grocery-department store type of self-service super-market expands. The decision may have to be made, because the buying public or a substantial section of it, may force this decision. To say that this whole question may resolve into an explosive and bitter issue would not be exaggeration.

It is true that a retail development of this kind, certainly dynamic, expanding and fascinatingly parallel to the straight-line, mass production of the factory, which has brought such notable reduction in production and packaging costs, can grasp the imagination and expand beyond reason. Judging by past events, it would not be improbable to find self-service in retailing running beyond its natural limits before the proper level of this form of selling is discovered. That there is a natural level few can doubt. A leading advertising agency, Fuller & Smith & Ross, Inc. classifies packaged, consumer goods into two broad groups:

Products of Reflex Buying are day-to-day small-change convenience goods, such as tooth paste, shaving cream, aspirin, breakfast food, big brand soap. People object to shopping for these products—they do not require information or demonstration—they want convenience. Products in this group are usually sold in mass distribution and the manufacturers must do nearly all of the selling through heavy consumer advertising. These products, ideally suitable for open display, self-service selling, will without the slightest question be the basic commodities sold in this way.

Products of Considered Buying are those goods where a sufficient amount of money is involved so that the buyer is willing to shop, wants to compare prices and values and seeks information and wants, in many cases, demonstration. Products of this sort usually sell in selected distribution where there is competent retail cooperation, where the retailer has the ability to develop a clientele who buy products of this sort and above all where there is alert, informed, personal selling.

These two product classifications are not separate, rigid, compartments. It is possible that many products now classified as those of Considered Purchase may attain a utility, convenience character with a standardized brand name recognition that will make them available for self-service. It is true also that many products will have brands specializing in each category—hosiery is a present example and cosmetic products, with present divisions of class and mass, for creams, lipsticks, nail enamels, etc. are in this category.

It would seem that the growth and expansion of self-service may well result in sharp divisions in distribution

(*Continued on page 725*)

# THE ANTIBIOTIC VISTA*

*By John E. McKeen*†

JOHN E. McKEEN

PREDICTIONS on the use of steel in the next 10, 20 or even 50 years might be stated with some degree of exactness inasmuch as there is no immediate prospect for the replacement of steel. However, the horizons in the chemical business are a good deal more nebulous, since the chemical industry invariably advances in the shadows of replacements and substitutions.

This is especially so in the case of "looking ahead" in the field of antibiotics, which is the newest and most important of the "new frontiers" in the chemical industry. It is, in fact, only nine years since the first patient was unsuccessfully treated with penicillin in England. He died because the supply of penicillin was exhausted before he could make a complete recovery.

Yet there is probably no man of science who will dispute that today antibiotics, vitamins, histamine antagonists and hormones constitute the four most significant therapeutic agents for which science can predict a decisive role in the health and future of mankind.

What is an antibiotic? The term "antibiotic" is only nine years old. It was first introduced by Dr. Selman Waksman in 1941 to distinguish those chemical agents isolated from cultures of various microorganisms which have the effect of destroying other microbes. However, the concept that one disease-producing creature destroys the life of another in order to sustain its own is credited to Pasteur and Joubert in 1877.

The modern period of antibiotics, however, dates back to 1939—eleven years after Dr. Alexander Fleming discovered penicillin. It was recognized, in 1939, especially as a result of the work of Dr. R. Dubos, that certain microorganisms in soil have the striking capacity to inhibit the growth of other microorganisms. In other words, numerous microbes in soil, or under proper conditions of cultivation, release powerful chemical agents that either interfere with the growth of other organisms or kill them outright.

Since penicillin came into general use, marked changes have taken place in the field of chemotherapy and infectious diseases. The introduction of antibiotics as chemotherapeutic agents in the treatment of infections has provided the medical profession with powerful new weapons. A whole new group of fatal diseases now lend themselves to therapy. For example, it is roughly estimated that antibiotics can be used with fair to excellent results in 30 to 50 per cent of the cases requiring the attention of the physician. These advances have given rise to the optimistic expectation that new antibiotics will be discovered which will be utilized in the treatment of presently uncontrolled diseases.

As a natural consequence of this expectation, since 1940 innumerable chemical substances have been examined including those produced by bacteria, molds, algae and even higher plants like tomatoes and onions. But the ratio of useful antibiotics is decidedly low, because a new one must meet very rigid requirements before it may be accepted:

1. It must kill or suppress the growth of a wide variety of pathogenic microorganisms and actually be superior to the antibiotic in current use;
2. It must have no damaging action on body cells;
3. It must be readily absorbed into the blood stream;
4. It must be stable and effective in body fluids;
5. It must have a low toxicity and should not produce resistant variants.

Only penicillin (1941)**, streptomycin (1944), chloromycetin (1947), aureomycin (1948), and the recently discovered antibiotic at Pfizer's research laboratories, terramycin (1950), come close to fulfilling these requirements.

The availability of these chemotherapeutic agents with their wide and effective range of action now enables the physician to select with some success the antibiotic which will be most efficacious in treating his

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*Presented at the Twenty-seventh Annual Meeting, The American Institute of Chemists, Inc., Hotel New Yorker, New York, N. Y., May 12, 1950.

**Dates when these antibiotics were first administered to patients are 1941, 1944, 1947, 1948 and 1950, respectively.

patient for a particular disease. While the major antibiotics have a wide antimicrobial spectrum, each of them appears to possess, in addition, a characteristic selectivity for certain disease-producing organisms. For example, penicillin exhibits a relatively high antibacterial action against certain bacterial pneumonias, streptomycin in certain forms of tuberculosis; chloromycetin in typhoid fever; terramycin and aureomycin in certain viral, rickettsial, psittacosis and protozoan infections, and terramycin particularly in certain obstinate pneumonia infections. The clinician and practicing physician, in addition, must give some thought to the effect of new antibiotics in combination with established ones. It frequently happens that a synergistic action takes place, that is, an enhanced effect is realized by the joint use of antibiotics which is greater than would be expected from the sum of their combined actions.

The more widely accepted antibiotics are effective against many gram-positive and gram-negative bacteria, tubercle bacillus, spirochetal diseases, against many rickettsial, psittacosis and viral diseases. However, there is an urgent need for chemotherapeutic agents effective against a few die-hard bacteria, such as proteus and pyocyaneus, and against certain virus diseases, such as poliomyelitis, common cold, measles, etc. Likewise, we have no adequate antibiotics potent against numerous fungus infections, plant diseases and tumor infections.

In addition to the gaps in the infectious disease spectrum, we have to contend with some drawbacks in certain of the antibiotics already in use. While the requirements which a new antibiotic must meet are exacting enough, there are frequently minor and, in some cases, major shortcomings. In administering antibiotics, heed must be given to side effects, to allergic reactions, to toxic effects on tissues, to drug resistance, and to long-continued dosage which may lead to the elimination of valuable bacteria from the intestines, to the loss of such vitamins as B and K and to the establishment of undesirable secondary organisms.

As an illustration, let us consider some of the difficulties encountered in the prolonged use of streptomycin.

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ILLUSTRATIONS COURTESY CHAS. PFIZER & CO., INC.

# THE T.G.A. MEETING

JOSEPH KEHO, PRESIDENT

IN HIS address as Retiring President, Charles A. Pennock said: "The fact that we are such a big industry is very fortunate indeed, for today we are in an era of bigness. Just how can we measure our bigness? If we take the 1947 government census we find only 26,023 people employed by perfume and cosmetic manufacturers. Unfortunately, all too often we are measured by this cold fact alone. Yet, it is only a part—and a very small part at that—of the whole story. An article in last month's BEAUTY FASHION made the point very clear that to this initial group of *direct* employees of manufacturers must be added approximately again as many men and women who sell and distribute cosmetics in over 100,000 outlets! To these, we add again those who sell cosmetic manufacturers *part* of their working time. Then there are the bottle makers, paper box manufacturers, the plastic people, the essential oil suppliers, and suppliers of countless other raw materials that go into our finished products. We must add, also, the beauty editors, magazine and newspaper solicitors, advertising agency people, printers and lithographers.

"As BEAUTY FASHION concludes, it is a very big industry *really*, because when you add it all up, the daily work of over 250,000 men and women is necessary to produce perfumes and cosmetics and make them available to the American public. If we add to these people their immediate families, it means that the livelihood of nearly a million people is dependent upon this industry of ours—an impressive figure, and, at the same time, a real responsibility for those of us upon whose planning and initiative the future well-being of the industry is pretty much dependent.

"Right now we are on the threshold of our greatest growth. We have only scratched the surface, considering all factors—our national wealth and income, the wide distribution of this income, the growing population, the greater growing leisure time—and hence the greater opportunity for social activities. What then has happened to this potential growth? Why have we been held virtually to a standstill for the past several years? In my opinion—the greatest single deterrent has been the excise tax. And I venture to guess that in the long run Uncle Sam has more to gain from the potential growth of the toilet goods industry—through increased corporate taxes and individual income taxes and stepped-up employment—than he has from *any* immediate return from the present excise tax.

"The tax is unfair and discriminatory. It should not be in our Federal tax structure and all tax experts agree on this point. We must keep pressing our case with faith in the ultimate fairness of our democratic processes. As an industry we cannot and will not give up the fight.

"Another important industry problem is, of course, that of the Robinson-Patman

Act, which in its provisions has been subject to many different interpretations. Is it better to continue as we are now, working in uncertainty, or is it better to cooperate toward a set of fair regulations, which will define what we may or may not do? Perhaps the issue will be brought to a head sometime in the ensuing year.

"Another problem important to everyone in the industry is that being tackled by the Fragrance Foundation. It should be of vital concern to all of us because fragrance is the very foundation of our business. I am proud of the progress this group has been making in the past year—and particularly proud of the way several companies, keen competitors out in the field, have been able to cooperate for the common good in a project of this sort. I am not so proud of the fact that so much of the load, both in man power and money is being carried by a relatively few companies. We all have an important stake in this undertaking—manufacturers, suppliers, wholesalers, and retailers as well.

"A problem of lesser importance is the economic squeeze many manufacturers are experiencing right now. History shows that our industry has maintained a fairly steady retail price structure for the past three decades—through prosperity and depression, through peace and war. Not very many other industries can point to the same record. Since 1914, which is the year for which we have the earliest estimate of volume, there have been just six years wherein our industry volume failed to top that of the preceding year, and three of these were during the depth of the 1930 depression. How have we been able to maintain this price structure in the face of steadily increasing manufacturing and distributing costs? Mainly by an almost constantly expanding volume.

"Now that we seem to be on somewhat of a plateau does not mean that we have come to maturity, as the statisticians put it. *Far from it.* But, until we do get rid of the burdensome excise tax, we should carefully study our production, our packaging, our cost of selling and advertising, and every other item that goes to make up our cost of doing business. We must operate on a sound healthy basis and in this we need the cooperation and understanding of those with whom we are doing business. This is just as much a problem of our suppliers and distributors as our own.

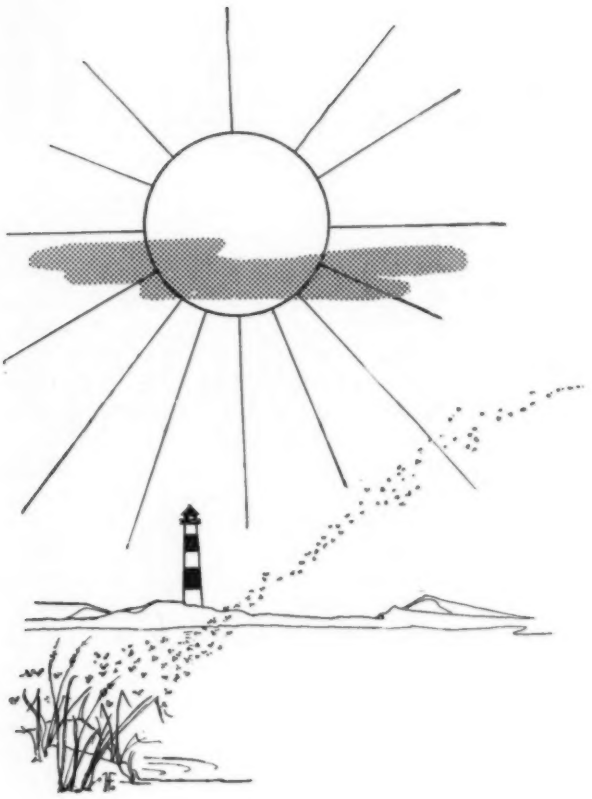
"Another industry problem which we must *all* study is the rapidly changing pattern of distribution which is taking place—the development of the suburban department store, the growth of the super-market, the expansion of door-to-door selling practiced so successfully by some of our members."

The "intended use" of an article aids in determining whether or not a product is a cosmetic, a drug, or both, said John L. Harvey, director of regulatory management, Food and Drug Administration. Said Mr. Harvey:

"The first logical place to seek evidence as to intended use is on the label or in the labeling of the article itself. However, we may examine advertising from newspapers, periodicals, and other printed sources. We may take down radio or television utterances about the article. We may listen to the sales talk of a department store or drug store employee—or catch the speech and demonstration of the special sales representative. All of these sources and others may furnish sound prohibitive evidence of intended use. Why all this concern use? Well this arises from the fact that the line between cosmetics and drugs is closer than you think. If an article promotes attractiveness by the mechanism covered in the definition for cosmetics it

(*Continued on Page 725*)

# COMBINATION COSMETIC PREPARATIONS



*By Harry Hilfer*

## 1. SUN SCREEN AND INSECT REPELLENT

IN MANY cases there are two entirely different functions which may be desired in a single product. This is especially true of certain specialized preparations designed to take care of two sets of conditions which may normally be expected to occur simultaneously. Perhaps the best example of simultaneous sets of conditions is the frequent prevalence of insects at bathing and swimming resorts. Therefore, preparations containing both insect repellents and sun screen agents have become increasingly popular.

These preparations may be made in several different forms. Perhaps the easiest is solution of the sun screen which is needed in a lesser percentage in the insect repellent where a comparatively thicker film is required. Such a mixture, however, is rather oily to the touch after application and the next logical development would appear to be to dissolve the active ingredients in alcohol so that the alcoholic film so applied would, after evaporation of the solvent, leave a thinner film and therefore one with greater aesthetic appeal. A third

method of achieving the same result would be to incorporate the effective ingredients in an emulsion, which is perhaps the most difficult approach since the insect repellents generally are difficult to emulsify into stable colloidal systems.

The proper choice of ingredients would depend on the type of preparation desired. Of the insect repellents available, chiefly, dimethyl phthallate, ethyl lexanediol and indolone, the dimethyl phthallate seems to cover a wider range of insects than do the other two, though the latter have better repellency against certain species than does the dimethyl phthallate. The armed forces during the last war found a mixture of the three the best solution. It would, therefore, seem best to include a mixture of the three in any such preparation. There are some physical characteristics inherent in both dimethyl phthallate and indolone which detract from aesthetic appeal, principally the odor in the dimethyl phthallate, and the color of the indolone. Most of the cosmetic preparations, therefore, have turned to the ethyl lexanediol as the principal repellent. It is the opinion of the author, however, that the mixture of the three would have the greater effectiveness, all things considered.

There are a large number of substances available as sun screening agents, with good backgrounds of chemical testing insofar as their propensities towards irritation as well as sun screening are concerned. The literature covering these substances is rather complete and it is not within the scope of this article to discuss their relative merits. In their consideration, however, it is well to note that a number of substances available are amino benzoates and are possessed of marked anesthetic properties. If it is desirable to lessen the pain due to sunburn previously formed, these substances serve a useful purpose. This is in addition to their sun screening property. Work done with these agents by the U. S. Public Health Service showed that under extreme conditions, particularly in tropical areas, the chemical screenings by themselves were not effective enough against the conditions imposed. It was, therefore, recommended that a purely physical barrier against sunlight be incorporated as well. The physical barrier recommended was titanium oxide, one of the most opaque materials known, but its use in cosmetic sun screens has been small, if at all, because of its whitening effects.

The insect repellents are all mutually miscible with each other and may be dissolved in alcohol without any too great difficulty. This also applies to the sun screening agents, which are principally esters of substituted benzoic acids, most of them in the amino benzoate or hydroxy benzoate category. Some of the amino benzoates may also be dissolved in water with the addition of an equivalent amount of a mineral acid, but this does not hold true for those esters containing a high molecular weight grouping, joined as part of the esters to the aromatic carboxy group. It therefore would become easily possible to add enough water to the alcoholic solution of these materials without causing a precipitation, and with a desirable lessening of the bite due to the application of 95 per cent alcohol. Any such dilution, however, would effect the solubility of dimethyl phthallate if present, since its toleration for water is small. Ethyl lexanediol with two hydroxy groups, as hydrophiles, can withstand a greater aqueous addition.

The emulsion of these substances is perhaps the best method by which a mixture of them could be applied. By its use the dehydrating effects of alcohol may be overcome. Since a minimum of 20 per cent of the insect repellent must be used in order to be at all effective, formulation poses something of a problem. On purely theoretical grounds, since the author has done no work on this problem, ethyl lexanediol would appear to be the most easily incorporated since it should behave somewhat as an hydrophilic group. It would, therefore, seem that a stable emulsion may be made by using triethanolamine and stearic acid as the emulsifier. Further stabilization may be effective by the use of glyceryl monostearate or any other of the desired stabilizers in this category. A suitable sun screen reactant may be incorporated along with the oil phase.

Dimethyl phthallate would be much more difficult to emulsify, but the use of a mixture of the non-ionic agents now available shows promise in this direction. Another possible means of incorporation is the use of quaternary ammonium compounds, which show a marked ability in their behavior towards materials of this type. A further advantage of the quaternary ammonium compounds lies in their bacteriostatic properties and the film would, therefore, act as an anti-infection functionary if abrasions or cuts are suffered.

This paper, unfortunately, can give only a basic outline of methods by which these agencies may be utilized. No generalized program for development of emulsions can be set forth since the different agents have such varied properties. Any emulsion made from them must therefore, of necessity, be fitted to the substances which are to be used.

# NEW DRUGS FOR TUBERCULOSIS

PART II

*By Milton A. Lesser*

ILLUSTRATIONS COURTESY NEW YORK TUBERCULOSIS AND HEALTH ASSOCIATION

IT IS known[14] that the tendency for resistance to occur will increase as streptomycin treatment is prolonged beyond six weeks. Therefore, many workers believe that in most cases the duration of such treatment should be limited to five or six weeks and sometimes, to even briefer periods. Often, the suppression of an infection for a few weeks is sufficient to permit the patient's natural powers of defense to come to the fore. If relapse does occur, treatment can be resumed if the bacilli are still sensitive to the antibiotic.

The second method of combatting the resistance factor inherent in streptomycin is represented by the development and use of dihydrostreptomycin. As was observed in an early symposium[22] on this newer agent, its production by the catalytic hydrogenation of streptomycin is a good example of the laboratory production of an antibiotic with some properties superior to those of the parent substance. The new compound seemed to have lessened neurotoxic action and about the same antimicrobial efficiency as the parent compound. Administering dihydrostreptomycin to patients produced virtually all the important toxic reactions that have been observed with streptomycin, but only when relatively large doses were used. Thus, it was found that from 1.0 to 3.0 Gm. of dihydrostreptomycin can be given daily for at least 60 days without impairing the function of the organs of equilibrium.

Similar views with respect to toxicity have been expressed by other workers[23] and have also been given in the latest report[6] of the American Tradeau Society. In the latter publication it is noted that on the basis of current information, dihydrostreptomycin shows no advantage over streptomycin with regard to therapeutic efficiency. As a matter of fact, it has not been established that dihydrostreptomycin is as effective as the parent drug. In addition, despite early optimism, there has been no change in the rate of emergence of resistant organisms with the use of dihydrostreptomycin. Put another way,[12] organisms resistant to one compound are equally resistant to the other. At present, according to one authoritative view,[7] the chief value of dihydrostreptomycin appears to be in cases in which there is unusual susceptibility to the toxic manifestations of streptomycin or to sensitivity phenomena.

As an antitubercular chemotherapeutic agent, para-aminosalicylic acid is valued both for itself and for its use in conjunction with streptomycin. Commonly referred to as PAS, its potentialities as a chemotherapeutic agent in this disease was first indicated by Lehmann[24] in 1946. He had investigated a large number of derivatives of benzoic acid and of salicylic acid in a search for a substance with bacteriostatic properties against tubercle bacilli. The most active substance found was 4-aminosalicylic or para-aminosalicylic acid. This substance was bacteriostatic in a concentration of 0.15 mg. per 100 cc. for a specific strain of *Mycobacterium tuberculosis*. He also found that para-aminosalicylic acid was relatively nontoxic. He tested its value clinically by applying the drug locally to tuberculous abscesses and by giving it by mouth to patients with elevated temperatures. He observed that the fevers subsided and that there was clinical improvement.

Pure PAS is a white crystalline powder which forms a clear solution in water. However, as pointed out by Bogen, Loomis and Will,[25] even though the drug is made by a number of firms and despite the fact that patients have been issued for a variety of procedures for its preparations, there is still difficulty in obtaining adequate supplies of pure material. Even though the impurities represent only a small proportion of the material, their presence, plus the instability of the substance, accounts for the discrepancies in the literature regarding the compound's physical chemical, pharmacological and therapeutic properties. More than 60 different preparations of PAS have been examined by these workers. These preparations, they note, have borne various designations, such as: para-aminosalicylic acid, PAS, para-amino-ortho-hydroxy-benzoic acid, 4-aminosalicylic acid, 4-amino-ortho-2-hydroxy-benzoic acid, Pamasyl, Pamasil, Paramisal, Pamisyl, Parasal, and others.

They report that the taste of PAS is mildly sour, but not very unpleasant or acrid. It is very slightly soluble in water, about 0.5 per cent. The monosodium salt, however, is soluble up to 95 per cent. It yields a neutral solution, which is rapidly absorbed, and which has a somewhat bitter taste. The hydrochloride of para-

aminosalicylic acid is not generally used. Significant, however, is the observation that PAS hydrochloride and the sodium salt of PAS apparently have approximately similar effects on the growth of tubercle bacilli as the free base. The drug produces a tuberculostatic effect, but it is not bactericidal.

Studies have shown that PAS exerts a definite bacteriostatic effect on the bacilli, both in the test tube and in the body, and that it is well tolerated in therapeutically effective doses.[6] Lehmann[24] found that PAS has an action similar to that of streptomycin, but slower and less marked. Later work has indicated that the chemical has somewhat limited benefit as compared with the antibiotic. Thus, in one example,[7] 8.2 per cent of cases showed a marked or moderate roentgenological improvement with para-aminosalicylic acid as compared with 40.9 per cent with streptomycin.

As with the antibiotic, there is some evidence that the tubercle bacilli may develop resistance or fastness to PAS, if administration of the drug is prolonged. Lehmann claimed that the organisms do not develop resistance, even when they are resistant to streptomycin. However, there is some difference of opinion on this point. Thus, Delaude and his colleagues[26] reported that the tubercle bacilli of two of their patients first became resistant to streptomycin during streptomycin therapy and later became resistant to sodium PAS during treatment with para-amino benzoic acid.

Nonetheless, it is apparently much more difficult to obtain strains of tubercle bacilli resistant to PAS than to streptomycin. Moreover, in both laboratory experiments and in clinical experience, it has been found that PAS exerts its effects just as strongly on streptomycin-resistant as it does on streptomycin-susceptible strains.[25]

As was noted in an authoritative progress report,[6] para-aminosalicylic acid is relatively nontoxic. However, when given orally, it may produce symptoms of gastrointestinal irritation. In order to minimize these symptoms, it is suggested in the report that PAS be administered as the sodium salt in aqueous solution. Of interest in this connection are the observations of Anderson, Jansen and Wicks.[27] They found that out of 50 patients carefully studied for side-effects, only three required discontinuance of treatment with the sodium salt because of marked toxic manifestations during their 60-day course of therapy.

At present, according to authoritative opinion,[6] a dosage of 3.0 Gm. four times a day with meals seems to be adequate and to be well tolerated by most patients. When this amount cannot be tolerated without excessive symptoms, it may be necessary to reduce the amount to a total daily dose of 10.0 Gm. or less. Other toxic symptoms, like liver damage or signs of hypersensitivity, are best handled by stopping the drug. Although parenteral administration has been used,[28] it is not considered advisable to use the hypodermic route except in extreme emergency.

PAS is rapidly absorbed from the gastrointestinal tract; the rate of absorption depending partly on the physical form in which it is administered. Solutions of the sodium salt are most rapid in reaching the blood stream. The acid preparations may be much more slowly absorbed, particularly if within granules or com-

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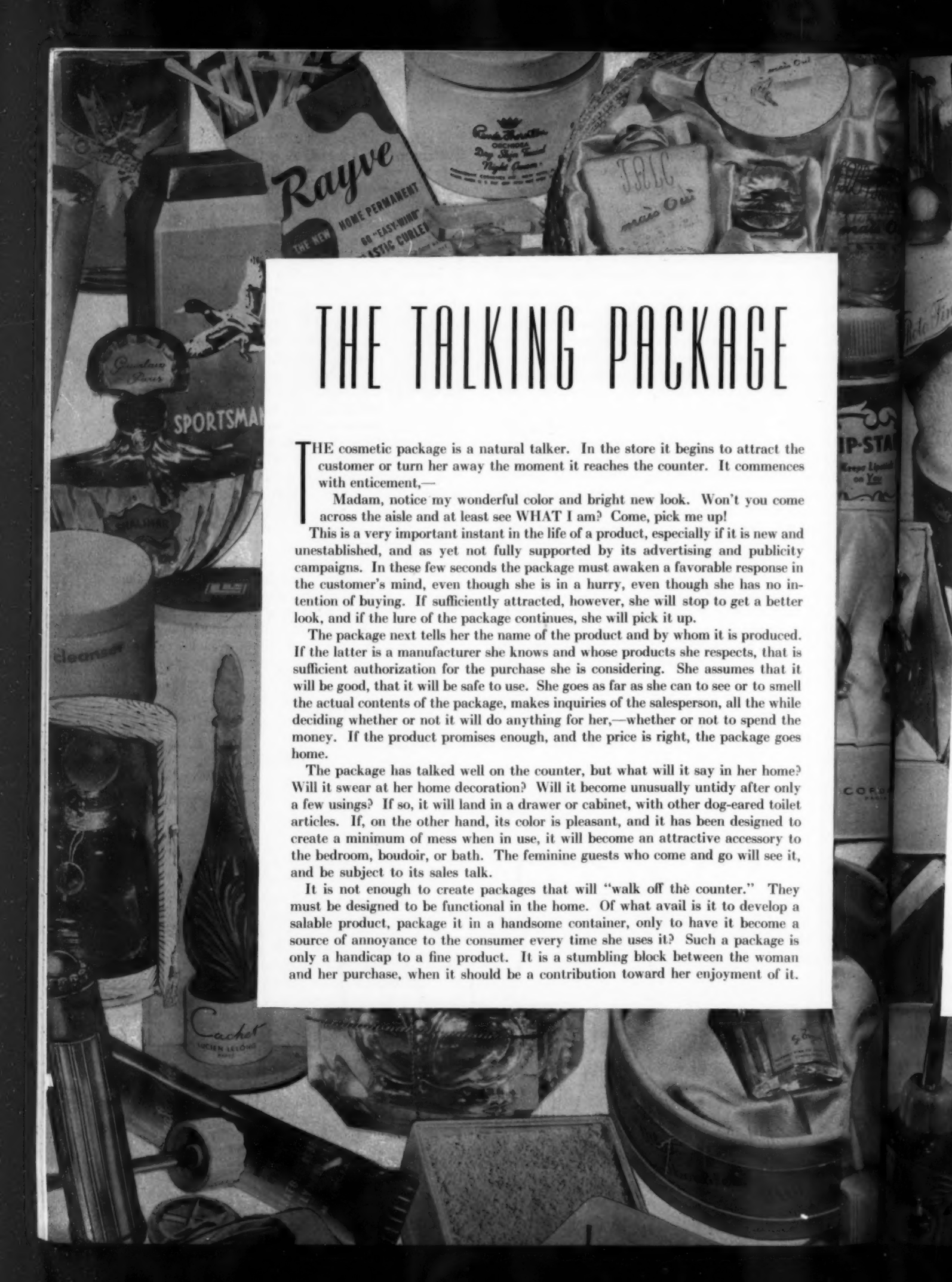



# THE TALKING PACKAGE

THE cosmetic package is a natural talker. In the store it begins to attract the customer or turn her away the moment it reaches the counter. It commences with enticement,—

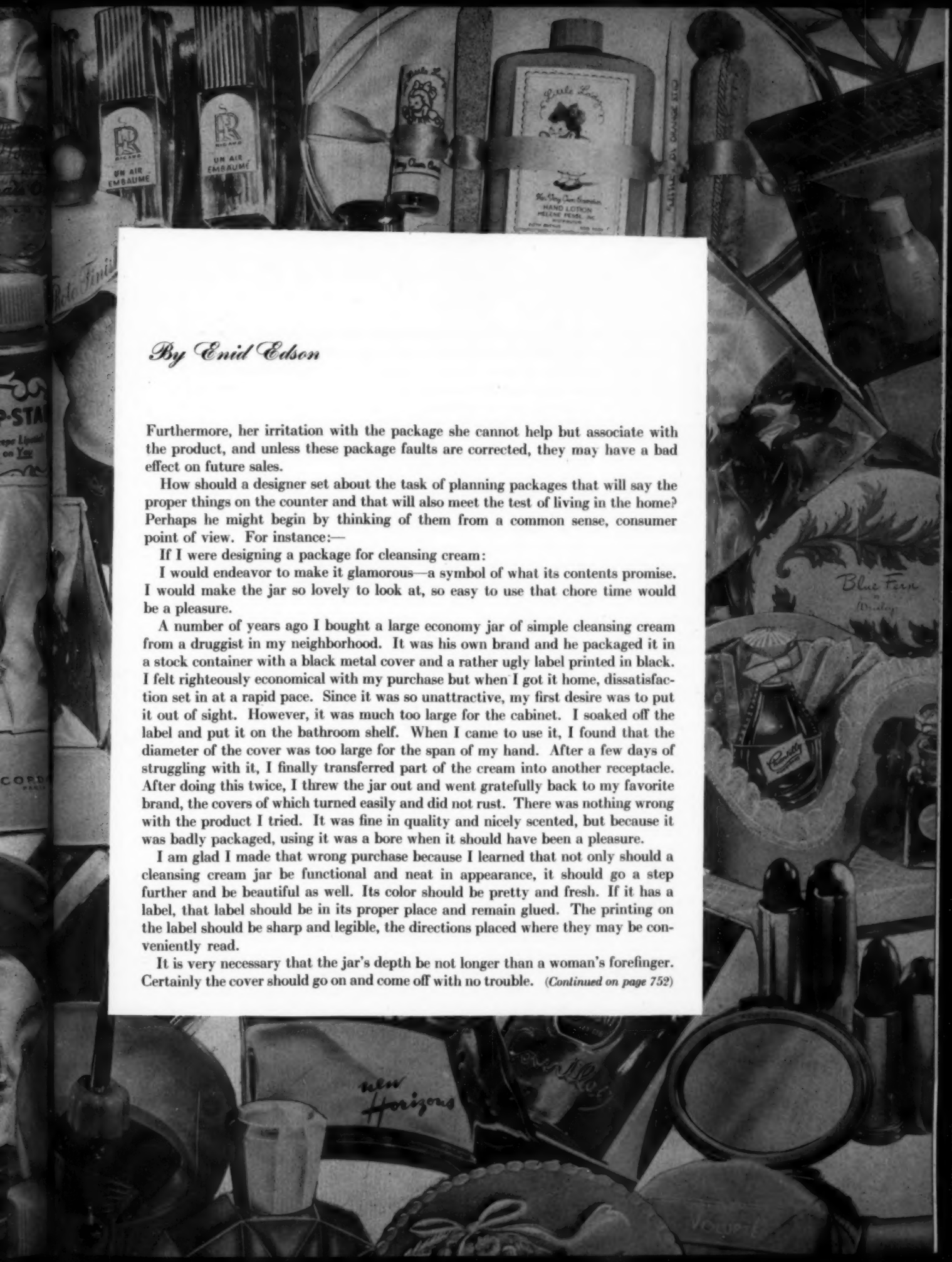
Madam, notice my wonderful color and bright new look. Won't you come across the aisle and at least see WHAT I am? Come, pick me up!

This is a very important instant in the life of a product, especially if it is new and unestablished, and as yet not fully supported by its advertising and publicity campaigns. In these few seconds the package must awaken a favorable response in the customer's mind, even though she is in a hurry, even though she has no intention of buying. If sufficiently attracted, however, she will stop to get a better look, and if the lure of the package continues, she will pick it up.

The package next tells her the name of the product and by whom it is produced. If the latter is a manufacturer she knows and whose products she respects, that is sufficient authorization for the purchase she is considering. She assumes that it will be good, that it will be safe to use. She goes as far as she can to see or to smell the actual contents of the package, makes inquiries of the salesperson, all the while deciding whether or not it will do anything for her,—whether or not to spend the money. If the product promises enough, and the price is right, the package goes home.

The package has talked well on the counter, but what will it say in her home? Will it swear at her home decoration? Will it become unusually untidy after only a few usings? If so, it will land in a drawer or cabinet, with other dog-eared toilet articles. If, on the other hand, its color is pleasant, and it has been designed to create a minimum of mess when in use, it will become an attractive accessory to the bedroom, boudoir, or bath. The feminine guests who come and go will see it, and be subject to its sales talk.

It is not enough to create packages that will "walk off the counter." They must be designed to be functional in the home. Of what avail is it to develop a salable product, package it in a handsome container, only to have it become a source of annoyance to the consumer every time she uses it? Such a package is only a handicap to a fine product. It is a stumbling block between the woman and her purchase, when it should be a contribution toward her enjoyment of it.




*By Enid Edson*

Furthermore, her irritation with the package she cannot help but associate with the product, and unless these package faults are corrected, they may have a bad effect on future sales.

How should a designer set about the task of planning packages that will say the proper things on the counter and that will also meet the test of living in the home? Perhaps he might begin by thinking of them from a common sense, consumer point of view. For instance:—

If I were designing a package for cleansing cream:

I would endeavor to make it glamorous—a symbol of what its contents promise. I would make the jar so lovely to look at, so easy to use that chore time would be a pleasure.

A number of years ago I bought a large economy jar of simple cleansing cream from a druggist in my neighborhood. It was his own brand and he packaged it in a stock container with a black metal cover and a rather ugly label printed in black. I felt righteously economical with my purchase but when I got it home, dissatisfaction set in at a rapid pace. Since it was so unattractive, my first desire was to put it out of sight. However, it was much too large for the cabinet. I soaked off the label and put it on the bathroom shelf. When I came to use it, I found that the diameter of the cover was too large for the span of my hand. After a few days of struggling with it, I finally transferred part of the cream into another receptacle. After doing this twice, I threw the jar out and went gratefully back to my favorite brand, the covers of which turned easily and did not rust. There was nothing wrong with the product I tried. It was fine in quality and nicely scented, but because it was badly packaged, using it was a bore when it should have been a pleasure.

I am glad I made that wrong purchase because I learned that not only should a cleansing cream jar be functional and neat in appearance, it should go a step further and be beautiful as well. Its color should be pretty and fresh. If it has a label, that label should be in its proper place and remain glued. The printing on the label should be sharp and legible, the directions placed where they may be conveniently read.

It is very necessary that the jar's depth be not longer than a woman's forefinger. Certainly the cover should go on and come off with no trouble. *(Continued on page 752)*

# DISTRIBUTION OF NEW PRODUCTS

*By Herman W. Leitzow**

AFTER the market for a new product has been determined, and the product has been named, labelled, sampled and the field staff educated; then a most important problem—getting that new product into the hands of the customer. This problem is becoming increasingly difficult, due in large measure to the accelerated tempo of postwar competition. The advent of many new pharmaceutical companies into the business has resulted in a veritable floor of new products in the postwar years

To get an original or fresh slant on this subject I decided to commit the cardinal sin of a sales manager, namely, use the poor field staff for survey purposes. With the aid of our Market Research Department, we prepared two questionnaires, one to the wholesaler and one to the retailer.

I decided to limit the discussion to these two most important channels of distribution. Yes, the idea seemed a good one at the time, but the actual preparation of a questionnaire, necessitating the framing of specific questions was something else again. After rejecting, reframing, and rephrasing question after question, we finally prepared the questionnaires and sent them out to the staff. The resulting survey covers approximately 250 wholesalers and about 400 retailers, widely distributed throughout the entire country, embracing all types of operations.

The first question we asked the wholesaler was:

"Do you think your business has been improved, been little affected, or hurt by the introduction of new pharmaceuticals?"

By far the largest number said their businesses had been improved; a few believed that it had been little affected; some suggested that volume has increased but was offset by a large inventory and lower profits.

Next question:

"When you receive unrequested shipments, what factors determine whether you accept or return the shipment?"

The majority of wholesalers stated that the company itself, its prestige, past record on new products and its policy were the most important consideration. Promotional support accorded the product was the next, followed by size of shipment. Several wholesalers suggested that they would *not accept any unrequested shipments* unless previous arrangements had been made with the manufacturer. A few wholesalers stated that they would accept shipments on a pay-on-reorder basis, which leads us into the next question.

"What is your opinion of a pay-on-reorder (POR) arrangement? How long should it be in effect after introduction?"

A majority of wholesalers stated that they favored POR shipments which might be expected. However, several said that they did not. Insofar as the time

*Domestic Sales Manager, Schering Corporation

factor was concerned, most wholesalers said that they would prefer to pay as soon as the initial order was sold out. Some, however, requested longer periods of time—about three to 6 months.

"What forms of advertising or promotion do you want from the manufacturer to insure your share of sales volume?"

Professional detailing headed the list with wholesale selling sheets a close second. This was followed by direct journal advertising and direct mail. A few wholesalers suggested initial deals and rebates for their salesmen.

Now a controversial question:

"What is your opinion of the practice of sending drug stores a free stock package on new product introduction?"

The majority did not favor sending such a stock package, but the vote was surprisingly close. Comments were interesting—some wholesalers suggested sending *sample* packages only. Others stated that a single unit in the smallest size would be all right, but that any larger quantity would result in lost business for them.

"Do you approve initial distribution in drop shipment to retailers, by manufacturers' representatives?"

Here the vote was almost evenly divided with a slight edge in favor of the initial distribution of drop shipment. Comments again were interesting, those who objected stated that their tasks became complicated when merchandise was returned after it has been drop shipped.

"Do you approve of special deals to retailers to gain wider distribution."

The majority opinion was favorable. Some wholesalers stated that special deals should apply to over-the-counter items only, and should not be offered on ethical merchandise.

"What do you dislike about present methods of introducing new products?"

Here were some of the comments: "Promotion too far ahead of distribution;
Supply not properly geared to demand;
Inadequate promotion to profession and trade."

"What are your suggestions for improvement over present method of introducing new products?"

It seemed logical that if we were to ask the wholesaler what he disliked about our methods of introducing new products, he should also be given the opportunity to give his suggestions for improvement.

The majority again stated that distribution should be set up and completed ahead of promotion; that more promotion should be sent to the trade and the profession, tying in directly with new product introduction; that supplies should be adequate, particularly

*(Continued on page 755)*

# COLD WAVE FORMULATION

*By J. R. Hollenberg**

PHOTO COURTESY RICHARD HUDNUT HOME PERMANENT

UP UNTIL the late '30s, hair was waved by the application of heat utilizing either electric curlers or other clamped-on devices employing chemicals, which when activated, gave off heat as a result of an exothermic reaction. About this time, some attempts were made to use solutions which did not require application of heat. These solutions were the forebears of what today we refer to as the cold wave. But, they were not too successful for a variety of reasons. In some instances the solutions were not efficient and took too long to react and even then did not produce a satisfactory wave. In others, the ingredients, such as ammonium sulfide, were highly toxic, unstable and malodorous.

Shortly after the outbreak of World War II, it became apparent that the materials necessary for the manufacture of the electrical heating devices, and the chemicals necessary for the exothermic type of wave would become increasingly difficult to obtain. The need for a new type of waving solution, dispensing with these essential items, became even more acute. About nine or ten years ago, the first successful commercial cold waving solutions, employing thioglycollates, appeared on the market. They were used in the beauty salons only, and were not at this time put up in packages for home use.

The early cold waves met with acceptance by the patrons of beauty parlors largely because they could be given in greater comfort, without the use of cumbersome mechanical devices, heat applications and attendant inconveniences. They, of course, had their disadvantages as well. The cold waving process took longer than other waving methods, and in the earlier formulations, the odor given off by the waving solutions, was not at all pleasant, to say the least. Since the whole technique of waving had to be modified in order to adapt it to the cold waving process, it accordingly took time to educate beauty shop personnel. However, in spite of these obstacles, cold waving established itself in the salons within a short time after its introduction. Its subsequent phenomenal growth is unparallelled by any other cosmetic or beauty treatment or preparation.

**The Cold Wave Mechanism:** Any discussion of the cold waving process must of necessity deal with the

*Van Dyk & Company, Inc.
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Fig. I

CYSTINE

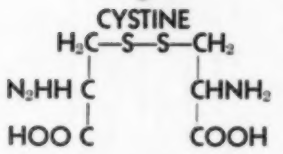


Fig. II

WAVING PROCESS (REDUCTION)

ammonium thioglycollate

$HSCH_2COONH_4$

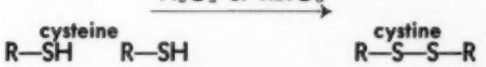
Fig. III

NEUTRALIZING PROCESS (OXIDATION)

Hydrogen peroxide

potassium bromate

$H_2O_2$ or $KBrO_3$




action of the waving solutions used on hair. This leads us into a discussion of the chemistry and structure of human hair. This topic alone would require enough material for several papers many times the length of this one. Therefore, at the risk of over simplification, only the barest outline of the subject matter involved will be attempted.

Human hair is composed of keratin, a typical protein consisting of elongated molecules of condensed amino acids. In this, as well as other respects, hair and wool have many properties in common. The structure of hair and other keratin fibres, such as wool, has been the subject of lengthy investigation, and there is a considerable volume of literature dealing with it. To cite a few; Mullin[1] reported on some of the earlier investigations into the nature and structure of human hair. It will be of interest to note that it was Stary,[2] who in 1928, first postulated the theory of cystine cross linkage as the basis of hair fibre, a theory which is generally accepted as fact today. The work of Speakman[3,4] and his associates in Great Britain is perhaps basic as regards the present thought on the structural picture of the chemical configuration of human hair. Harris[5,6] and others in this country have contributed along similar lines in regard to the structure of wool, and the effects of various chemicals, including thioglycollates, on wool structure. It was Phillips[7,8] and his associates who reported along similar lines on the effects of various chemical reagents on hair. As a result of the work of these and other investigations we have today a working theory, at least, as to the structure of the hair and the effects of different chemicals upon the hair when applied under varying conditions.

The properties of the hair, such as bulk, shape, elasticity, etc., are due to the distribution of cystine, which constitutes about 15 per cent of the hair protein. The cystine molecule consists of two amino acid groups linked together by two atoms of sulphur. These two atoms of sulphur are the key point of the cold wave process. In Figure I we show diagramatically the structure of a molecule of cystine, in which the sulphur atoms are encircled for the purposes of illustration. The measure of the efficiency of a given waving process is the degree to which the solutions involved react with this portion of the cystine molecule.

The function of the waving solution is to break the disulfide linkage while the hair is on curlers. This process, which is illustrated in Figure II consists of applying a solution of an effective reducing agent. This is accomplished by an ammonium thioglycollate solution at an alkaline pH, which reduces the disulfide linkage, forming SH groups, and splits the two halves of the cystine molecule into two molecules of cysteine. Although the thioglycollate solution is known as the "waving solution," this step is only half of the cold waving process. It is necessary to complete it by still another procedure. This step is an oxidation process, and is illustrated in Figure III. It, too, is accomplished while the hair is still on curlers. Here, a second solution, commonly, but erroneously, termed a "neutralizing" solution, consisting essentially of hydrogen peroxide, or potassium bromate, is applied to the hair. The effect of this solution is to oxidize the SH group and reconstitute the cystine molecule. Due to the reshaping of the hair, the location of the new cystine cross linkage is different. Consequently the hair retains its altered form and does not revert to the original.

**Formulation:** It can readily be seen from the foregoing that the most important solution in a cold wave kit is the waving solution. Although various reducing agents have been tried, today thioglycollates are used in the vast majority of cases. Ammonium thioglycollate seems to be the preferred solution, although some commercial products contain varied amounts of sodium thioglycollate as well. Before the introduction of cold waving solutions, there were no appreciable amounts of thioglycollates commercially available. In fact, there were rather few uses for them. Those that readily come to mind are as a reagent for iron; a dehairing agent for animal hides; and more recently, a depilating agent for cosmetic use. The early production of thioglycollates for use in the cold wave industry was hampered by wartime restrictions. It is therefore not surprising that

*(Continued on page 765)*

# In a "Siesta Mood" lately?

*Once in a while almost everyone feels he hasn't quite enough pep and energy . . . that he could use an afternoon "siesta." Since 1891 Ceregen* has been used as a tonic to combat that tired-out feeling.*

*A product of
The ULRICI Medicine Co., Inc.
Brooklyn 5, N. Y.

The Crown Lug Caps used to seal Ceregen* are made to exacting standards of precision manufacture. They provide a dependable seal and re-seal, with a simple quarter turn on or off. This feature is of practical satisfaction to packers and consumers alike.

Before choosing a closure and liner for your product, make use of Crown's Consulting Service. This service is maintained to aid you in selecting closures scientifically. With our years of sealing experience and complete analytical laboratories, we can accurately determine the closure that is best for your specific product. Our consulting service is at your disposal without obligation. Crown Cork & Seal Company, Baltimore 3, Md. *World's Largest Makers of Metal Closures.*

**CROWN CLOSURES**

Approved by Millions of Housewives

# PACKAGING AND SELLING

## ON EXCHANGING IDEAS

It seems to be generally agreed that it is a very good thing for countries to exchange ideas. Imbued with this thought, we have recently been listening, with a little extra attention, to the numerous foreign visitors who come to this office. The other day we were rather intrigued to have a visit from an Irish perfumer who had been making some calls on the retail trade before he happened on our office.

"I can't understand the American perfume business," said this bewildered Irishman. "Over in Ireland we have been brought up with the idea that all Americans are wonderful salesmen, but when I got over here and called on the trade I didn't get the impression that anyone is selling anything; they are giving it away."

Of course, we let that pass because we have been doing our best to educate Europeans that America's chief objective in the world is to give things away. So when we find any one from abroad who falls into that habit of thinking, we should be the last to criticize him because we are succeeding so well in our education.

However, this Irishman did have a great deal to tell us of interesting, local color. For instance, all through the war and until just recently he was doing a colossal business in cologne, limited only by the amount of alcohol and the perfume ingredients that he could procure. He said that one of his best customers was an old Irish lady who lived in a section equivalent to our New York Bowery who once a week came up to his little plant with a wheelbarrow and four empty gallon jugs which she had filled with cologne. The Irishman said this struck him as rather curious, but who was he to question miracles.

After this weekly transaction had been proceeding for some time, he was visited by a department official, equivalent to our revenue agent. This revenue agent had also decided that it was extremely curious that the old lady with the wheelbarrow, who lived in a section where there were few bathtubs or bath facilities and certainly not the kind of social life leading to such large and profuse applications of cologne, should be such a regular customer. He instructed the perfumer to continue making sales and to say nothing to anyone until the revenue agents could get the evidence.

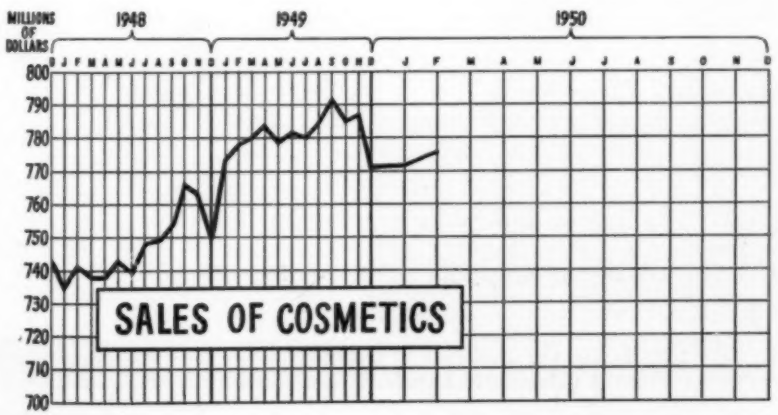
Apparently there is a drink in this part of Ireland called "Red Betty" which can be vicariously made from such things as cologne, shellac and other products not normally considered potent except as a result of government regulation. A few weeks later the perfumer was told by the government that the old lady with the wheelbarrow was in the clear and that he could continue selling her. It seems that during this war period and following the war the Irish people could obtain very little coal from England or any other source. They therefore had no gas, and oil and gasoline was equally restricted. In other words, many people found it almost impossible to cook. This ingenious old lady, however, with her wheelbarrow had a regular route like a milkman and was supplying the customers of her slum district a liquid measure of cologne which they strictly used for cooking purposes.

The perfumer himself thought that this was such an excellent idea that he promptly resumed his daily habit of tea, using for that purpose the particular brand of his cologne which he considered most suitable.

This perfumer had an experience which gives some insight into conditions in world trade today. He was approached by an American manufacturer who stated that he would send him every six months a thousand dollars worth of cologne for which no dollars need be remitted to this country. The Irishman went to his Customs, said there were no dollars to remit and that he would pay the import duty in the country's own currency and on that condition he was permitted to bring it in. Because there is apparently an active demand in Ireland for American goods, this product was sold out immediately, whereupon he was visited by a member of the Treasury.

The Treasury agents soon procured the information that a son of the American was attending a university in this country and that the money from the sale of this cologne was to be remitted to this student for living expenses.

Retail sales of cosmetics for the twelve months ended with February 1950 amounted to $775,651,000. This compares with $770,918,000 for the twelve months ended with January 1950 and with $777,164,000 for the twelve months ended with February 1949.



# A STOCK BOTTLE WITH Slender Grace

Here is proof that true beauty of design and the American system of mass production can go hand in hand!

The L-33 stock bottle has eye-catching grace and appeal that makes it an ideal package for any product to be sold to or used by women.

And it also has the traditional SWINDELL quality that protects your product and insures you against undue shipping losses.

L-33 is immediately available from stock in the following sizes: ½ ounce, 1, 2, 4, 6, 8 and 16 ounce. Write for samples of the sizes in which you are interested.




L-33

## 3 other Stock Bottles

Beauty of design, durability, uniformity and dependability are characteristics of these SWINDELL bottles. Available from ⅛ ounce to 16 ounce sizes.

*When you think of bottles, think of*

# Swindell

**PRIVATE MOULD BOTTLES**

Creative and artistic designs for private mould bottles (hand or machine made) are a SWINDELL specialty. Call on us for ideas.

**SWINDELL BROTHERS, BALTIMORE, MD., 40 W. 40th ST., NEW YORK-18, N. Y. - ROBERTO ORTIZ, HAVANA, CUBA**

This transaction put the perfumer in such a jam that he finally had to personally appeal to the Finance Minister to keep from going to jail. The Finance Minister told him that he had evaded the law, because if he had not given this money to the student, the father would have been compelled to send dollars which was the entire object of all the restrictions. He was told, because of his apparent innocence, he would not be given a jail sentence in this case, but that all the money would be seized and held by the government until world trade conditions permitted a return. "Probably," said the Finance Minister, "this would be in time for the American manufacturer's grandson to inherit the money."

We have been doing our part in giving ideas to the people abroad. The Chairman of the Group of American Sales Experts who have been visiting England made a very terse comment on the way we do things, and we repeat this because we think it should become famous. The Chairman of this American Delegation stated in a speech, "We don't keep goods, we throw things away," and then a definition of durable goods is "goods that will last until the payments are completed."

Just recently an American friend of ours, who has spent some time abroad, was asked how conditions are over there. He said, "Well, I will tell you the situation and you can judge for yourself. The people in Europe are adopting every one of the bad ideas from America and they are hanging on grimly to all of the bad ideas of their own."

## Refill Package

Manufacturers of packaged goods, particularly of high priced luxury products such as many perfumes and cosmetics, have very often sought a way out of some of their problems by offering a refill package of their product in a plain, economical container.

This has rarely worked out. In fact, in the perfume and cosmetic business, except for dram sales in a retail store, we do not know of any case where it has been consistently successful in a long established company.

Primarily, the objective of a refill container is to give the customer, who becomes an established user, an opportunity to buy more of the product without each time having to purchase the beautiful, original package which very often makes the buyer feel as if she were giving herself a Christmas present. The trouble with this reuse container has been that if the price is

marked up on the same basis as the original product, the difference in the price between this reuse container and the original, beautiful container makes the buyer realize that she is paying far too much for the product in its original form.

On the other hand, if the reuse package price is figured at a sum that will not make the consumer feel that she is paying too much for the original package, then the savings for the refill is not sufficient to build up a volume of sales and accomplish its purpose.

Another definite objection, particularly in the case of prestige products as perfumes, is that the manufacturer has two different packages on the retail shelf. One that plainly establishes the prestige position of the product, both through the beauty of the container and the price, and another very plain package which lends no appearance of prestige to the product and plainly establishes a utility character for the product.

One of the best solutions for this problem that we have seen is in the product *Accent* made by the International Mineral & Chemical Corp. *Accent* is a chemical (monosodium glutamate) used for giving a lift to the natural flavors of food. The product is packaged in a very attractive 4 oz. glass shaker. This company now has on the market an attractive box which could be used as a gift product. This box contains in the one package the original glass shaker filled with the product and beside it a refill tin canister. It seems to us that this overcomes all of the objections to the refill package which we have listed above.

## Clever Closure

This industry has made many ingenious uses of the bottle closure besides its primary function of conveniently and perfectly sealing in the content. One of the most frequent uses has been to make an accurate measuring device of the closure. Another use has been to so decorate the closure in form and color that it has aided substantially in transforming a stock bottle into an individual container.

Just about the most ingenious and practical use of the closure which we have seen for a very long time is the new line of Crosse & Blackwell cocktail mixes. This packaged line was designed and the details worked out by the Crosse & Blackwell engineers and with the Maryland Glass Corporation, which made the containers.

The distinctive feature of this package and the closure is that the closure is also a small supplementary container. For instance, the martini cocktail bottle has as a closure a small jar of olives; the old fashioned, a small jar of cherries. The entire package makes an extremely attractive and harmoniously formed, double container.

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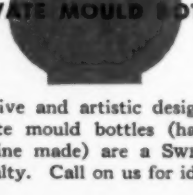

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## The Love Life of a Business Man

Many business men become absorbed in a form of love life that distorts their judgment and occupies all their waking hours. None of the romances famous in history, such as Dante and Beatrice, Hero and Leander and the Brownings or others, have anything in intensity, passion and constancy that can compare to this love life of some business men.

The love life that we are talking about is all in the mind, and is in a sense purely platonic, so if you are looking for something else, you may as well stop reading right here.

The most frequent object of this passion of the business man is his own product. Almost always this object of his passionate devotion is something that he has created himself, and many times in its youthful beauty this product built his business and permitted for a space of years the business man to bask in all of the reflected, glamorous light of this object of his affections. Too often, however, this object of his devotion is merely something that he himself possesses and through this mere fact of possession has established a mystic control over his affection.

Two notable examples of this form of love life were Henry Ford and his "Model T" and Franklin with the air-cooled, wooden frame automobile of that name. Any one who is really old enough to understand what that deep emotional complex called love can do to a human being will have vivid memories of how disaster overtook one of these men, because of his subborn affection, and very nearly overtook the other.

There are some people who are able to contain an emotion and at the same time retain a cool appraising view-point. This is the state of mind, for instance, which a judge or a newspaper reporter must attain to reach success in his profession. But when the business man lacks this ability, loses his objectiveness towards his product and is not continually and critically appraising it from a competitive view-point, from the view-point of consumer approval and from the view-point of what it might be with real research, then indeed he is in a very bad way. History shows, and is showing every day, that he is heading for a cropper.

Another love life of the business man and a very frequent one is his lust for volume. Part of this arises from an inner egoism which is driving a man to be a big shot no matter how great the cost may be. Part of it arises from the fact that many men are picked up by a whirlwind and don't know how to get back on the ground. In great part, however, it seems to be the result of a purely American temperament which continually drives people to exceed each day, each week, each month and each year the record of the previous period. Volume without profit should be a discouraging thing because there is something sterile about it and yet it is a siren that is continually driving many business men, both big and small, into destruction.

Expanding distribution is another form of love life to the business man and in this realm of the mind many men are chasing this elusive houri and yet they know not where they go.

Some day some great sales executive with a scientific kind of mind will turn up a law, which while it may not be stated with the same exact precision as Newton's law, for instance, will still contain the basic elements of permanent truth entitling it to be called a law. This law of sales will state and define the balance between the potential of sales and the potential of distribution. In other words, it will state that for any one product at any one time in its development there is a definite expected potential of sales. This potential may be hard to estimate because such characteristics as business conditions, the effectiveness of the sales force, the amount and character of advertising, the competitive condition and the history of the product must all enter in. Nevertheless, an experienced producer with an established product has a pretty clean-cut idea of what could be termed the expected potential of sales.

This expected potential of sales should have a calculated distribution that is neither too small nor too large. There certainly must be a definite scientific ratio for balance which should exist between these two factors. While there is no such law in existence, many experienced business men and salesmanagers have an instinctive feeling for such a balance. But many more sales managers and business men are certainly completely unaware of the need for any such thing and are therefore continually driving themselves into stomach ulcers in the futile attempt to expand distribution far beyond anything justified by potential sales. We say futile attempt because when this objective of too much distribution is accomplished, which very often happens, the company and the product are almost always putting their foot on the first step of the downward escalator. It may take some months or even some years before this structural weakness becomes evident and before this dilution of the retailer to a point of marketing weakness begins to undermine the entire marketing structure.

Probably if the inner causes of business failures or declining business could be really analyzed, this one factor would prominently appear and perhaps replace the outward surface reasons given by the credit companies as a cause of many failures. Of course we realize that products and businesses, like human beings, are all highly individual entities and that all sorts of things can happen. For instance, a company suffering from over-distribution can suddenly hit on a dynamic, successful advertising campaign or can add to their product a new quality which sweeps the market. These, however, are exceptions and what we are really talking about is the passionate love of so many business men for illusions that have usually turned out to be very disgraceful little tramps.

We remarked some time ago, and it is still a pet idea of ours, that there is just as much science in business and in selling as there is in chemistry, physics or medicine. Some day this will be understood, and perhaps then there will be no more chance of a business man being invited to occupy the sales manager's chair unless he is at least a Doctor and probably a Ph.D. of business science than there would be for the technical director to assume the post of director of research without similar qualifications in his field.

As far as we have been able to observe the business colleges have very largely fallen down in this analytical appraisal of the scientific forces in selling, so that in the meantime without any doubt many business men will continue to be lured by their own particular Loreleis to their own particular distractions.

## Better Watch Out

Business men had better read up on a new situation which has developed in anti-trust suits making possible triple damages.

Several recent court decisions have awarded triple damages on grounds that would not have been entertained by the courts only a few years ago. This looks to us like one of the most dangerous things that has happened to business in the last 16, or is it, 17 years.

Certainly no one responsible for company policy, even a small company, should dare to be without some information on the subject.

**Visible Quality in the Package**

**Can Reflect the**

**Invisible Quality of the Product**

***Leading Manufacturers of***

***Cosmetics Recognizing that Fact***

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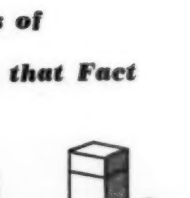

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SUPERIOR PRINTING SURFACE — ASSURED UNIFORMITY
BRIGHT FAST AND SOIL RESISTANT COLOR
HIGHER VARNISH GLOSS — BRIGHTER – SMOOTHER
CUSTOM MADE FOR EVERY ORDER — CONTROLLED COLOR MATCHING
LUSTROUS BRUSH FINISHES AND EMBOSSINGS

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*Representatives*

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Philip Rudolph & Sons, Inc., Philadelphia
A. E. Kellog, St. Louis
Norman A. Buist, Los Angeles

### Returned Goods

A leading book publisher has just been cited by the Federal Trade Commission in a complaint stating unlawful discrimination in accepting the return for credit of unsold test books.

This complaint describes the corporation's "returned for credit" policy as a service or facility which "was not accorded all competiting purchasers on proportionate equal terms."

### Tie-In's

The illegality of the "tie-in" sales agreement can now be deemed well established according to Herbert A. Bergson, Assistant Attorney General.

The anti-trust laws contain a specific provision dealing with such clauses in section three of the Clayton Act. The problem under this provision very often is to decide whether the issue of the tie-in sales may result in substantially less competition or may tend to create a monopoly.

In a recent speech, Mr. Bergson gave a hypothetical example in the marketing of "Old Bliss" brand of whisky made by "Fusil Oil Distillery." In marketing this popular brand, the manufacturer required retailers to purchase and feature a very bad brand of his company known as "Old Delirium Tremens."

Mr. Bergson pointed out that it would be injurious to distributors if the distillery persuaded or coerced customers into buying "Old D. T.'s" so as to get "Old Bliss." It would not be necessary to have a written agreement requiring such sales in order to have an illegal conspiracy to violate the law. The agreement might be a merely "tacit understanding."

Exclusive accounts or selected distribution tend to magnify the evils of the tie-in clause type of agreement. According to Mr. Bergson, when such clauses are used the distributor cannot shop around to pick and select the best brand.

### Paper Box Code

A code of fair trade practices has been established by the Paper Box Board of Trade, Inc. which comprises about 60 per cent of the set-up paper box industry, doing a business of $20,000,000 anually in the New York and eastern area.

Covered in this code are the methods of unfair competition which has so long harassed the set-up paper box industry. The average box manufacturer operates as a comparatively small unit, with many of these companies having an annual sales volume of $100,000 or less a year. This large number of small companies, including some that are located in areas of relatively low labor cost, brought about a period of severe competition with sales below cost.

Other kinds of unfair competition have included substitution of products, the inducing of pressure of contract, enticing away of employees, commercial bribery, defamation of competitors, false invoicing, allowing exclusive discounts and various forms of special services.

### Department of Commerce Monthly Retail Trade Report

*Retail sales of all kinds in drug and department stores showing sales for the month of March 1950 as compared with the same period in 1949.*

| | *Department Stores* | *Drug Stores* | | *Department Stores* | *Drug Stores* |
|---|---|---|---|---|---|
| Atlanta | +22 | +8 | Minneapolis | -2 | +6 |
| Baltimore | -2 | +3 | Milwaukee | +4 | +3 |
| Birmingham | +3 | +3 | Newark | +3 | -1 |
| Boston | +8 | -1 | New York | 0 | +2 |
| Chicago | -2 | -2 | Philadelphia | -1 | +1 |
| Cincinnati | +3 | +7 | Pittsburgh | +1 | -2 |
| Cleveland | -1 | -3 | Providence | +4 | +6 |
| Dallas | X | +16 | St. Louis | -2 | -6 |
| Detroit | +1 | -3 | San Francisco | +4 | -6 |
| Los Angeles | -5 | -6 | Seattle | +1 | +2 |

### Hair Raising

Two product groups of the cosmetic and toilet preparation industry which have certainly been booming during these last few years of frustration have been in hair products and in shaving products.

Everybody knows how hair products began a spurt a few years ago when some new, intelligent research entered into this field and developed some new ideas which made very effective advertising possible. Following shortly on the heels of this expansion in shampoos and hair dressings, the development of the home permanent wave lifted all hair products into a new and major status in our industry and brought certain branches of the retail trade, notably the department store, where hair products had been largely ignored, into active participation in developing this field.

Shaving preparations have had an almost equally rapid growth. Whether it was the effect of training in the military service, high employment at high wages, or a change in sentiment towards personal appearance, certainly American men are shaving more generally and much more frequently than they did before 1940. It is estimated that over 53,000,000 men are regular shavers today. These men buy over 3,000,000,000 razor blades a year, more than twice as many as in 1940. In electric razors these men purchased, or were given for Christmas, over 1,725,000, and sales of electric razors are now slightly below the 1947 peak of 2,500,000.

### Expensive Sales Manual

The Council of Economic Advisers started out bravely enough as a new brain-trust in this era of mighty intellects recruited from the universities.

In selecting the new Chairman and in appointing the new liberal minded professor to the Council, President Truman made it very clear that he wants his economic brain-trusters to serve not only as advisers but as crusaders for the Fair Deal philosophy before Congress.

This means that the annual report of the C. E. A. will unquestionably be the most expensive sales manual prepared this year.

### New Presentations of Squeeze Bottle

The first appearance of the squeeze bottle in the pharmaceutical line has been made by the R. J. Strasenburgh Co., of Rochester, which has repackaged its Naprylate Powder in a Plaxpak bottle. The powder is forced through a polyethylene insert plug in a fine spray which can be directed accurately to the infected area.

The Kerr Manufacturing Co. is presenting a novel use of the squeeze bottle in the production of the Kerr Flamette Alcohol Torth. Filled with alcohol, a slight pressure on the plastic bottle produces a pinpoint flame. Releasing the pressure immediately retracts the flame.

## WHAT IS THE ANSWER . . .

# PLANT No. 2

# 45,000 sq. ft..

**On One Level From Receiving Platform To Shipping Platform**

Our Answer to increased demand is not only additional space—it is additional *efficiency* and *economy*, and assured packaging *perfection*. Send us your product (tablet, powder, cream or odd-shaped item) and your instructions. We do the rest—unit package, attach catch-covers, assemble in punch-boards or mailers, over-wrap with cellophane, and—assemble packages for detailing, sampling or standard-sale distribution—the completed package ready for mailing or shipping to warehouse, wholesaler or distributor. These additional facilities—Plant No. 2—represent a further contribution to finer packaging, at less cost. This is yours without one cent of capital investment in space, machinery, or equipment.

**IVERS-LEE COMPANY, NEWARK, N. J.**

R. P. Scherer Limited — Exclusive Sanitape-Sealtite Contract Packaging Licensee in Canada.

***New** Straight Line Continuous Packaging*

***New** 40 - 60 Ft. Motor Driven Conveyor Production*

***New** High-Speed, Unit-Packaging Machines*

***New** Automatic Carton Making Machines*

***New** Adjustable, Cellophane, Over-Wrap Machines*

***New** Motor Skid Carriers For Material Transport*

*Truly A Production Manager's Dream Come True*

SANITAPE SEALTITE

Sanitape-Sealtite is a unique method of packaging pills, tablets, capsules, creams and powders, by which each unit or unit dose is sealed in its own airtight compartment surrounded by a crimp flange assuring complete protection and maintained efficacy. Packages, machines and methods covered by U. S. and foreign patents and patents pending. Available only through the Ivers-Lee Packaging Service. Infringing imitators will be subject to legal prosecution.

# NEW PRODUCTS AND NEW PACKAGES

ABBOTT LABORATORIES have released Sulvetil with penicillin, 100,000 units, and streptomycin, 25 mg., for veterinary use. This product is a homogenized suspension of sulfanilamide, penicillin G potassium and streptomycin sulfate in light mineral oil designed for the treatment of streptococcic or staphylococcic mastitis.

Additional new products introduced by Abbott include Sylamin cream, for use in the treatment of ringworm of the scalp, and Sucaryl Sodium, a new sweetening agent in tablet form with tha natural sweet taste of sugar, which, unlike saccharin, retains its sweetness in cooking, baking, and canning and boiling solutions.

HARRIET HUBBARD AYER has developed a new purse size Cologne Stick in Sweet William scent. Pale green in color, the stick is designed to cool and refresh the skin as it releases its fragrance. Another Harriet Hubbard Ayer creation is Dry Ice—a deodorant that looks like perfume and smells like orange blossoms.

BOURJOIS, INC., has introduced a new cologne, Waves of Fragrance, packaged in a bottle moulded to suggest waves on the shore. Bourjois is also promoting a special summer package of Evening in Paris eau de cologne and talcum, named Summer Symphony.

CHERAMY INC. is introducing a Stick Cologne in its April Showers fragrance. Packaged in a fluted glass container, the stick will be ready for the summer market on July 1.

CHILCOTT LABORATORIES, DIVISION OF THE MALTINE COMPANY announces the marketing of Cellothyl, a methylcellulose bulk laxative in granule form which may be sprinkled over solid food, cereal or vegetable or may be taken in liquid form. When taken with food, granular Cellothyl does not produce bulk until after passing through the stomach and in no way interferes with digestion or vitamin absorption.

CIBA PHARMACEUTICAL PRODUCTS, INC. is releasing Carmethose-Trasentine, a combination of carmethose, magnesium oxide, and the local anesthetic and antispasmodic, trasentine. The product is said to provide relief of gastric discomfort and pain in cases where there is high acidity, hypermotility and spasm in connection with peptic ulcer, gastric neuroses, simple gastritis, and other forms of gastric dysfunction.

COURTLEY, LTD., is introducing the newest addition to its line of men's products, Courtley's Antiseptic Deodorant Body Powder, which is being marketed in a 3½ ounce glass bottle.

CUTTER LABORATORIES announces the release of Undesilin Ointment-Cutter, effective in the treatment of fungus infections such as athlete's foot and ringworm of the scalp and hands. Compounded in a water-washable base which will not stain clothing, the ointment is greaseless with a high fungicidal activity and low incidence of irritation.

DE KAMA, INC., announces a new product known as Breath of Roses . . . a perfume for lip and mouth to combat disagreeable breath odors. When applied to the tongue or the corners of the lips, Breath of Roses imparts a pleasing, sweet fragrance.

DERMETICS INC. announces Sta-Free, a new spray deodorant and antiperspirant. Sta-Free, whose active ingredient is chlorhydrol, is packaged in an aqua plastic dispenser. It dries quickly, is non-irritating, and will not harm fabric.

EATON LABORATORIES, INC., is making available Furaspor Ointment, a powerful new fungicide for the treatment on ringworm of the scalp. It is available in 1 per cent concentration in a white, non-staining, odorless, vanishing cream base.

"42" PRODUCTS, LTD., combines lanolin and hormones with other oils to create a preparation that is a complete beauty treatment in one operation. "42"Lanolin with Hormones is available in two ounce and eight ounce containers. Two other "42" preparations now available are "42" Duo Creme Shampoo and Rinse and "42" Coloreze Creme.

DOROTHY GRAY, LTD., introduces the new Dorothy Gray Cologne Atomist available with two scents . . . Golden Orchid and Sweet Spice. The fragrance is propelled from a dainty blue and white unbreakable aluminum container.

GUERLAIN, INC., has made available a toilet water to match its recently introduced perfume. Fleur de Feu Toilet Water is packaged in the characteristic Guerlain bottle.

KINGS MEN, LTD., introduces Kings Men Deodorant, a lasting cologne deodorant in the popular Castle Eire aroma for both men and women. In an introductory promotion the deodorant is packaged as a companion to Kings Men After Shave Lotion.

MARTHA LORRAINE has created two new items as additions to her line of cosmetic brushes—the Eye Shadow Brush and the Fine Line Brush—accessories eye-accent.

THE WM. S. MERRELL COMPANY is offering Nitranitol with phenobarbital and theophylline to protect the failing heart from the added strain of edema by decreasing abnormal capillary fragility to a safer, more normal condition.

JOHN HUDSON MOORE, INC., announces a new solidified after-shaving lotion, the Sportsman Toddy Stick. The consistency of the scented stick has a frosty, antiseptic touch that imparts a feeling of vitality and good grooming.

# If you don't see the container you want...

Here at Continental we make selling containers for some of the best names in the proprietary and toiletries fields. We have a big family of these containers, and it's constantly growing.

For example, we make hinge-cover boxes in a wide variety of sizes, round friction-plug cans for miscellaneous household products, sifter-top cans in round, oblong and oval shapes for all kinds of powders, as well as a wide assortment of round lock-top cans — some with and some without inner seal that are excellently adaptable to many dry products.

We can fit a Continental can to your product. And you'll be delighted by the way our sparkling lithography puts your product's best foot forward. All along the line, you'll find Continental people eager to please you — and we're ready to begin today.

*You can't beat Continental as a dependable source of supply!*

CONTINENTAL CAN COMPANY

100 East 42nd Street

New York 17, New York

THE NATIONAL DRUG COMPANY announces the addition of three new products, Benat with $B_{12}$ (oral), Benat with $B_{12}$ (injectable) and Aleudrin Hydrochloride tablets. The oral preparation is for retarded growth in children and general nutritional deficiencies of the vitamin B complex; the injectable is for anemias as well as sprue and other vitamin B deficiency conditions; and the tablets are for the symptomatic treatment of bronchial asthma.

PACQUIN, INC. has introduced a new hand lotion bottle made by Hazel-Atlas. The caps are manufactured by Owens-Illinois Glass Co., and the labels by the J. C. Dillon Company.

PINKY PRODUCTS, INC. is introducing a new nail polish remover in a small, flat-bottomed bottle, equipped with a built-in brush. The solution is fast-acting and cuts the polish-removing time to a fraction of that with old polish removers, according to the manufacturers.

POTTER DRUG & CHEMICAL CORP. recently introduced Cuticura Shampoo, which is said by the manufacturers to cleanse hair and scalp of soil, excess oil and loose dandruff, beautify the hair's natural brilliance, leaving the hair soft and manageable with no extra rinse required. It is packaged in an eight ounce Duraglas bottle with black molded plastic closure supplied by Owens-Illinois Glass Company.

RAINWATER INCORPORATED is introducing to the market a complete new line of hair preparations, in which are included Rainwater Soft Shampoo, Soft Shampoo for Oily Hair, Soft Creme Shampoo, Soft Liquid Shampoo, Soft Creme Rinse, Azure Rinse, Soft Rinse Supreme, Supreme Fluid Treatment for Dandruff and Cleansing, Creme Fixative, Hot Oil Shampoo, Massage Creme for Dry Hair, Massage Creme for Oily Hair, Evening Mist-Fragrance and Supreme Coloring Creme.

A. H. ROBINS COMPANY, INC. recently added two new products to its list of pharmaceuticals: Pabalate, an antirheumatic combining para-aminobenzoic acid and sodium salicylate in an enteric coated tablet and Entozyme, a specially constructed tablet which releases digestive enzymes at different levels in the alimentary canal. Entozyme has been clinically tested for a wide range of digestive disorders, according to the manufacturer.

SCHERING CORPORATION is introducing the procaine salt of penicillin-G consisting of one molecule of penicillin-G combined with one molecule of procaine base, to be administered by deep intramuscular injection.

G. D. SEARLE & CO. has announced the availability of Banthine, an agent for peptic ulcer which consistently reduces the commonly associated hypermotility and also usually abolishes or reduces excess acidity. The initial dosage may be 50 or 100 mg. every six hours, day and night, with subsequent adjustment to the individual patient's needs and tolerance.

SHARP & DOHME, INC. has released Thalexyl Capsules, an effective bacteriostatic - antiseptic combination with an analgesic effect, useful in the treatment of urinary infections. The capsules are indicated in the treatment of acute and chronic urinary tract infections, such as ureteritis, cystitis, and pyelitis.

SHULTON, INC., has come up with a neat gadget designed with a sprinkler top for Desert Flower Body Sachet powder. Made of plastic, dotted with pinpoints, a slight turn will release the powdered perfume.

SKOL is conveniently incorporated as part of the equipment of beach bags of attractive design created by Roger Van S and by the Marguerite Novelty Company.

SMITH, KLINE & FRENCH LABORATORIES have made two major changes in Par-Pen, used in sinusitis. The strength has been increased to 5000 units of penicillin per cc., which, clinical observations demonstrate to be the most effective concentration for intranasal antibacterial action. The package size is 15 cc. (½ fluid ounce) bottle which should last a week, the same length of time the penicillin remains potent at room temperature.

STANDARD LABORATORIES, INC., has begun distribution of its new Sloan's Balm Analgesic in a completely redesigned combination display carton and shipping container by George Reiner, New York.

STRONG COBB & CO., INC., announces the first automatic injection of aqueous suspension of Procaine Penicillin G in Ampins, which provides a sterile, free-flowing aqueous suspension of uniform consistency, completely absorbed in the tissues.

TAFT PHARMACEUTICAL COMPANY, INC. is offering Dugan's Special Vaporizing Solution in a re-designed package. The solution is said to be a refreshing, fragrant, non-sticky scientific combination for effective relief of catarrh. The two ounce, four ounce, eight ounce, and 16 ounce Duraglas containers and metal closures are supplied by Owens-Illinois Glass Company.

TUSSY COSMETIQUES announces the addition of Blue Ice to tye Midnight fragrance series. A cologne stick tinted a delicate blue and impregnated with the Midnight fragrance, Blue Ice has a light musky scent suitable for daytime and evening wear.

THE UPJOHN COMPANY is ready to distribute two new products, Berubigen-refined, sterile, a highly purified form of vitamin $B_{12}$ to be used in the treatment of pernicious anemia, nutritional macrocytic anemia, macrocytic anemia of infancy, and sprue; and Sugracillin flavored granules, an antibiotic or buffered crystalline penicillin G potassium, used particulary in pediatrics and for patients who prefer fluid medication.

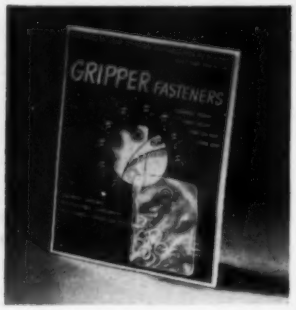
VANPELT & BROWN, INC. has introduced Oradial, a brand of ethinyl estradiol, one of the most potent oral estrogens in use today. Relatively small amounts are needed, according to the manufacturer, a factor which reduces the cost of treatment to the patient.

# TRENDS IN PLAXPAK PACKAGING

**MERCK & CO., INC.,** uses an 8-ounce Plaxpak bottle as a container for five pounds of "Mercury Merck". The bottle's unbreakability prevents complete loss of the precious contents, a feature laboratory technicians will greatly appreciate as an aid to efficiency.

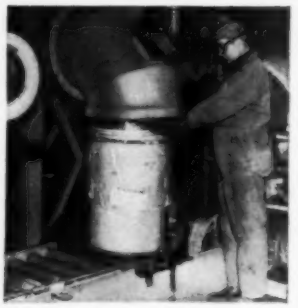
**SQUEEZE IT — A PUFF IS ENOUGH** crisply tells consumers how easy and convenient it is to use Puff, a new liquid deodorant. Packaged in a yellow Plaxpak bottle, Puff protects with just a slight squeeze. No more dipping, rubbing, or cleaning fingertips.

**AQUET, A LIQUID DETERGENT** for laboratories, is packaged by Emil Greiner Co., in a Plaxpak bottle. Greiner promotes reuse value of the bottle as a handy dispenser for chemical reagents and provides label space for indicating nature of new contents.




**SCOVILL MANUFACTURING COMPANY** packages prongs for their sew-less Gripper Fasteners in a Plaxpak polyethylene bag. The tough Plaxpak bag reveals the contents but does not tear or dry out, thus remaining lastingly useful as a container for the prongs.

**WINDSOR CHEMICAL LABORATORIES** uses a specially designed Plaxpak bottle in an opaque green color for its liquid deodorant, Dead-X. Here is more evidence that for liquid underarm protection, the Plaxpak bottle is first choice for appearance and convenience.



**PLAXPAK FILM'S** high chemical resistivity and moisture-proof protection improve and simplify packaging of corrosive chemicals. Hooker Electrochemical Company uses Plaxpak drum liners to package monochloroacetic acid and seal it against moisture.

★ In addition to its packaging products, Plax makes a wide variety of thermoplastics in rod, sheet, tube, and other forms.

The trend toward the Plaxpak bottle continues to grow stronger. Manufacturers — large and small — are finding that this unbreakable and eminently practical package perks up the sales picture. More and more consumers are discovering the advantages of the Plaxpak bottle and enjoying the fact that breakage is banished forevermore. Plaxpak film is another packaging product that is gaining in use and public acceptance. For more information on Plaxpak products, please write us.

PLAX BLOW-MOLDED PRODUCTS ARE MADE UNDER THE FOLLOWING U. S. PATENTS 2128239, 2175053, 2175054, 2230188, 2230190, 2260750, 2283751, 2349176, 2349177, 2349178

PLAX
FOR PLASTICS
NOT SUBSTITUTES···IMPROVEMENTS

**PLAX CORPORATION,** P. O. BOX 1019, HARTFORD 1, CONNECTICUT
In Canada, Plax Canada, Ltd., Toronto

Offices in New York City, Syracuse, Philadelphia, Cincinnati, Chicago, St. Louis and Houston

Each day newer and better aerosols are being packaged. In addition to the score of existing products, manufacturers already marketing aerosols in the drug field to disperse colognes and shaving lotions soon will be producing hair preparations, shampoos, sun-screen lotions and a wide variety of other drug-store products.

It's a fast-growing market you'll want to examine carefully when you consider that 1950 will see an estimated doubling of aerosol sales over 1949.

# Sales go up...

## when you package your product for the expanding aerosol market!

**It's a tailor-made market for you.** The new aerosol market is ready-made for your product. The sales trend is definitely upward, and chances are you can market aerosols without making any changes in your current distribution. Surveys show that 3 out of every 10 consumers made their most recent aerosol purchases at drug stores, where aerosol sales are greater than those at department stores, variety stores or any other outlet.* Moreover, the same surveys indicate that over 90 per cent of the drug stores currently stock aerosols.

**Plan now to secure a profitable position for your product.** It's easy to have a small quantity of your product packaged for an effective and economical test. But whether you're packaging for a test campaign or full-scale production, it's smart to choose safe, dependable propellents.

That's because, as the survey mentioned before revealed, customers giving reasons for buying aerosols listed effectiveness first . . . and safety an important second. And both factors are directly related to the quality of propellents used.

**There's a "Freon" safe propellent for every aerosol requirement.** You get safer, more dependable aerosol performance when you select "Freon" propellents. These propellents are safe. They're nontoxic, nonflammable and nonexplosive . . . harmless to flesh, furs, fabrics, finishes and foods. "Freon" propellents have no color or taste and are practically odorless.

Remember this important safety factor when you choose propellents for your aerosol products. It's one reason why the majority of manufacturers wisely specify "Freon" propellents.

*Note: "Freon" propellents are available for all pressures.*

***FREE!** *Your own digest copy of Kinetic's important survey of the aerosol market—the only report of its kind anywhere. Write: Kinetic Chemicals, Inc., Tenth and Market Streets, Wilmington 98, Delaware.*

*"FREON" is Kinetic's registered trade-mark for its fluorinated hydrocarbon propellents.*

KINETIC
REG. U. S. PAT. OFF.

# "FREON" SAFE PROPELLENTS

**HAPPY** (*News Flash*) **HOLIDAY** *says:*

# THE BIGGEST BY A NATIONAL MAGAZINE

## ! EXTRA !

## 3,018 DRUG STORES CASH IN ON HOLIDAY'S RECORD-SMASHING VACATION-NEEDS PROMOTION FOR 1950!

This year's promotion is worth twice as much to Holiday advertisers of drug-store merchandise because it is twice as big as the record-breaking 1949 Holiday tie-in. This year retailers are going all out by using more than a half-million Holiday display pieces throughout their stores to help sell vacation needs.

## HOLIDAY SELLS THE IDEA

*From border to border, from coast to coast, here's . . .*

# STORE-WIDE PROMOTION IN DRUG-STORE HISTORY!

## NO OTHER MAGAZINE IS AS HOT AS HOLIDAY IN NATURAL MERCHANDISING APPEAL!

From articles to artwork, from cover to cover, Holiday stimulates the desire for a fuller, richer life. Thumb through a copy and see how every page sells the idea that sells the goods. See how, more than any other magazine, Holiday puts readers in a buying mood.

Each month more than 820,000 families are captured by this Holiday mood. And what families! They're up-and-doing people . . . active, prosperous, not only ready and willing to buy, but able to buy. For Holiday families have a higher average income than the readers of any mass magazine.

No wonder retailers in every field enthusiastically tie in with Holiday promotions—promotions that are record-breaking in their success year after year.

**DRUG RETAILERS PARTICIPATING IN 1950 PROMOTION**

**CHAIN STORES**

Cunningham-Shapero · Gallaher Drug Co. · Read Drug Co.
Ford-Hopkins Co. · Katz Drug Co. · Peoples Drug Co.
Owl-Rexall · Liggett-Rexall · Lane-Rexall · Renfro-Rexall

**WHOLESALERS SERVING INDEPENDENTS**

Kiefer-Stewart Co., Indianapolis · Philadelphia Wholesale Drug Co., Philadelphia
Northwestern Drug Co., Chicago · Southwestern Drug Corp., Dallas

**HOLIDAY ADVERTISERS PARTICIPATING IN 1950 PROMOTION:**

ANSCO Cameras · ANSCO Film · CHAP STICK · EASTMAN KODAK · IMRA · LA CROSS Manicure Sets · MARLBORO Cigarettes · MURINE · REMINGTON RAND Electric Shavers · RITEPOINT Lighters · HELENA RUBINSTEIN · SPORTSMAN Men's Toiletries · STANLEY Vacuum Bottles · STOPETTE · SUTLIFF Tobacco · SUTRA · TAMPAX · TUMS · U. S. HOWLAND Swim Caps · UNIVERSAL Outing Set · WILLSONITE Sun Glasses · WINCHESTER & BOND Flashlights and Batteries · WRISLEY Soap · ZIPPO Lighters

**RESULTS:** Watch for the Announcement in the Fall of
THE FINAL RESULTS OF THIS MERCHANDISE-SELLING PROMOTION!

# THAT SELLS THE GOODS!

FAMOUS PRODUCTS
F. P. B. A.*
Competition
First Prize in Cosmetics Class to Gair for bright silver Playtex Mitt carton created for International Latex Corporation, Dover, Del.
Honorable Mention to Gair for striking gold book carton produced for Max Factor, Hollywood, Calif.
*Folding Paper Box Association of America

# SELL LIKE Magic IN

# FOIL CARTONS

# BY GAIR

## SALES OF YOUR PRODUCTS WILL REALLY SOAR WHEN PACKED IN THESE BRILLIANT MULTI-COLOR FOIL CARTONS

WHEN a Gair-Reynolds foil package is displayed on the dealer's counter, showcase, shelf or in the window, a sensational sales impact is automatically created. In many instances sales have doubled and tripled through the persuasive influence of these brilliant, multi-color foil cartons.

There's an effective range of color combinations for name and product reproduction in these glittering foils ...definitely accentuated through the process of embossing...truly an aristocratic appearance with incomparable sales appeal.

Speed up your sales...jump ahead of competition...step up the prestige of your products...with Gair Foil Cartons.

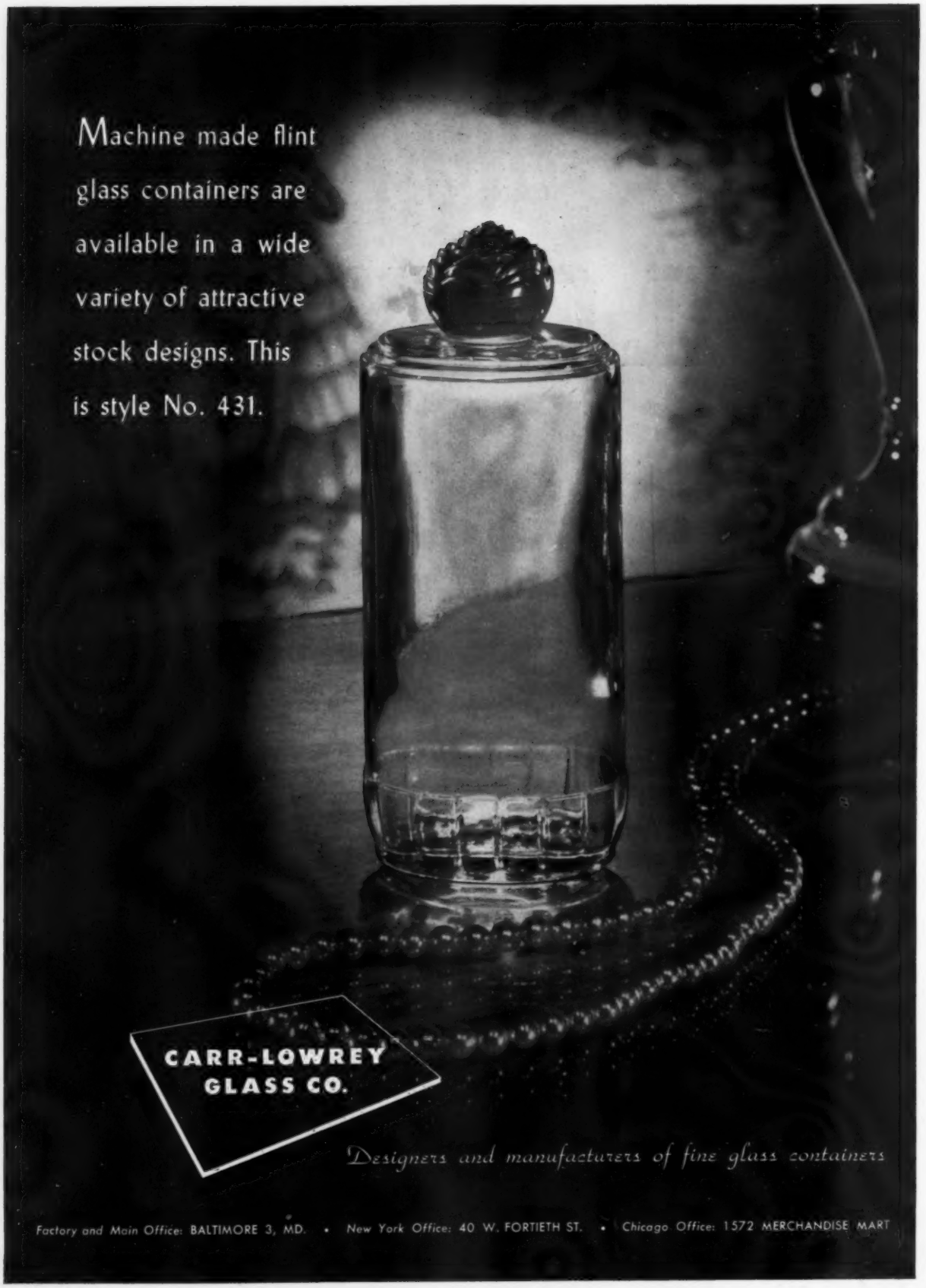
Keep your package fresh looking, clean and sparkling. Yes, and here's another sterling feature...FOIL WILL NOT SOIL.

*Write for samples and information*

## ROBERT GAIR COMPANY, INC.

**NEW YORK • TORONTO**

PAPERBOARD • FOLDING CARTONS • SHIPPING CONTAINERS


Machine made flint glass containers are available in a wide variety of attractive stock designs. This is style No. 431.
CARR-LOWREY GLASS CO.
Designers and manufacturers of fine glass containers
Factory and Main Office: BALTIMORE 3, MD. • New York Office: 40 W. FORTIETH ST. • Chicago Office: 1572 MERCHANDISE MART

# A BETTER DROPPING PART MAKES A BETTER PRODUCT

#1

#2

#3

#4

## To Be SURE Your Liquid Preparation Can Be Properly Dispensed

SPECIFY

# *New Perfection* DROPPING PARTS

Many a fine product has been rejected by the public simply because some seemingly small detail was below standard. The dropping part can be such a detail—an apparently simple device, yet vital to the user's satisfaction.

Since 1931, when Pennsylvania Glass originated the screw-cap dropping part, we have specialized in this important dispensing unit. This advantage in experience and specialization has made NEW PERFECTION Dropping Parts everything their name implies. Longer experience and undivided attention to one product have resulted in superior quality and reliable performance. To be sure of the best—specify NEW PERFECTION Dropping Parts.

We can supply various colors of bulbs in natural rubber or in our special oil-resisting Amekine compound, caps of plastic or metal in many sizes and colors, and various types of dropper glasses in any length with calibration in any color or plain. New Perfection dropping parts will fit your own bottles, or can be supplied in combination with our Modernistic bottles in Amber, Blue, Green or Clear glass. Sizes: 2cc, ⅙, ¼, ½, 1 and 2 oz.

***Write for Samples and Quotations***

## PENNSYLVANIA GLASS PRODUCTS CO. INC.

"Glass Goods of the Better Kind"

430 N. CRAIG ST. • PITTSBURGH (13), PA., U.S.A.

A STOCK PLASTIC CAP FOR

*Glamorous Packaging*

"CLOVER LEAF" stock design -- in the most popular cosmetic sizes, and in any color.

STANDARD CAP
AND MOLDING COMPANY, INC.
PLASTIC CLOSURES

307 S. EATON STREET • BALTIMORE 24, MD.

OFFICES IN ALL PRINCIPAL CITIES • LATIN-AMERICAN REPRESENTATIVE: ROBERTO ORTIZ, HAVANA

*The basis for each of these visualized "extra-special" packages is a low-cost stock-mold container*

## HOW TO ADD *Allure* TO YOUR TOILETRIES

### Choose your package from more than 1400 Duraglas bottles "functioneered" for beauty and durability

Half your sales battle is won when your product is in a "love-at-first-sight" container. And you needn't spend a fortune to have one!

There are more than 1400 Duraglas containers ready for you to pick from. Rounds, flats, shorts, talls —each ready for an individually designed closure and label to give you a truly distinctive package—with all the economies and advantages of stock-mold containers.

If you prefer a custom-made container, Duraglas Center specialists will create a customer-appealing design for your container with the strength, toughness and durability that mark *all* Duraglas bottles.

For everything from bottles to closures and shipping cartons, call your local Owens-Illinois office.

**Duraglas** Bottles are Protectors of Quality

TRADE MARK REG. U.S. PAT. OFF.

OWENS-ILLINOIS GLASS COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

# METAL CONTAINERS *and* CLOSURES
*by*
# BRIDGEPORT

Vanities
Jar Caps
Bottle Caps
Drawn Talc Containers
Lipstick Containers --- Swivel, Slide, Automatic
Powder Boxes
Perfume Vial Cases and Caps
Lip Brushes
Dry and Paste Rouge Cases

*and*

Other Special Metal Products for the Cosmetic Industry

**THE BRIDGEPORT METAL GOODS MFG. CO.**
*Established in 1909*
BRIDGEPORT CONNECTICUT

**FOR** liquids of any consistency, pastes and creams, PERL MACHINES make possible

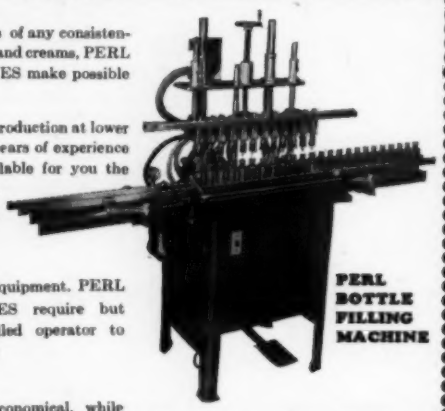
**FASTER** production at lower cost! 30 years of experience make available for you the most reliable and accurate

**FILLING** Equipment. PERL MACHINES require but one unskilled operator to make their

**USE** most economical, while unexcelled in efficiency.

**"PERL"** guarantees satisfaction in every respect for

**MACHINES** which have provided the solution to filling problems in many an instance where others failed.



**PERL BOTTLE FILLING MACHINE**

**Your Production Problem May be Solved by one of These PERL Machines**

- Precision Universal Filling Machines.
- Straight Line Vacuum Filling Machines.
- Can Filling Machines.
- Piston Filling Machines.
- Tube Filling and Closing Machines and many more.

For detailed information please write to

**PERL**
**MACHINE MFG. CO.**
**72 Jay St. Brooklyn 1, N.Y.**

## TRADE-MARK RECORD

*for Perfumes, Toilet Preparations, Soaps*

**Covering All Trade-Marks in Class IV and VI**

**Soap Preparations**
**Perfumes**
**Cosmetics**
**Depilatories**
**Manicure Preparations**
**Foot Preparations**
**Permanent Wave Supplies**
**Hair Preparations**
**Men's Toilet Preparations**
**Tooth and Mouth Preparations**
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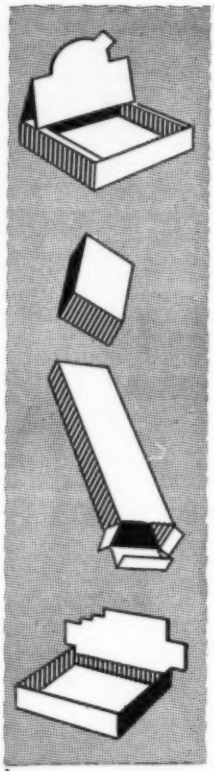

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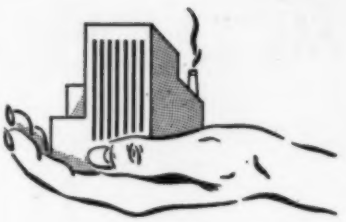

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June '50: 66, 6

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*1. Wetzel, N.C., Fargo, W.C., Smith, I.H. and Helikson, J., SCIENCE 110: 651 (Dec. 16) 1949.*

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# NEWS...

### Patten Heads Proprietary Ass'n

Lupton Patten, president of the Chattanooga Medicine Co., was elected president of the Proprietary Association, May 27 at the annual meeting of the Association. Other officers elected are: First Vice-president, Edward T. T. Williams, president of Lambert Pharmacal Company; Second Vice-president, S. M. Rising, of J. H. Guild Co.; Third Vice-president, Fred. E. Rathburn, of Olive Tablet Co. Three members of the Executive Committee were reelected for three-year terms, they are: George S. McMillan, vice-president of Bristol-Myers Company; Alvin G. Brush, chairman of the board, American Home Products Corporation; Lunsford Richardson, chairman of the board, Vick Chemical Company. William F. LaPorte, president and general manager of Whitehall Pharmacal Company, was elected to the Executive Committee for one year to complete the term of Dr. R. P. Herwick, who resigned.

LUPTON PATTEN

### Abbott Appointments

Charles Moyer, manager of the Philadelphia sales area for Abbott Laboratories, has been appointed manager of the new Philadelphia branch, according to H. S. Wilkinson, director of sales. C. E. Fenber, formerly in the Chicago branch, will be office manager of the Philadelphia branch. Harry Kohl, Omaha manager of a Nebraska area sales district, has been transferred to the managership of a district covering portions of Illinois and Iowa and succeeds the late J. K. Pruitt. Earl Clauson will succeed Mr. Kohl in the Nebraska area.

### Keho President of TGA

Joseph Keho, president of Dorothy Gray, Ltd., was elected president of the Toilet Goods Association at their annual convention at the Waldorf-Astoria Hotel, New York, last month. Mr. Keho had previously been secretary, vice-president, and member of the board of directors of the association.

He succeeds Charles A. Pennock, president of Hudnut Sales Company, Jean Despres, vice-president of Coty. Inc., was elected a vice-president of the association to succeed Mr. Keho. Philip Smith, Yardley of London, Inc., succeeds Ralph P. Lewis of Harriet Hubbard Ayer, Inc., as treasurer.

JOSEPH KEHO

New directors elected to the association were Edward J. Breck, John Breck Company, Springfield, Mass.; Charles A. Mooney, president of Lentheric, Inc.; Roy L. Murphy, T. J. Holmes & Co., Chartley, Mass.; and Fritz Lueders of George Lueders & Co., New York.

Those men reelected as vice-presidents were John A. Ewald, Avon-Allied Products, Inc., New York; H. J. Lehman, Wildroot Company, Buffalo; and Davis Factor, Max Factor & Co., Hollywood, Calif.

### Douglas Resigns from Bourjois

The resignation due to ill health of Paul H. Douglas as president of Bourjois, Inc. was accepted late last month by the board of directors, which simultaneously elected him vice-chairman of the board and named Norman F. Dahl to succeed him as president.

Mr. Douglas was assured by physicians that his complete restoration to health depends on relief from the burdens and responsibilities of his position. The company thereupon tendered Mr. Douglas a long-term contract under which he will continue to serve Bourjois, Inc. and its affiliates in directions compatible with his state of health.

### Fonda Named A.P.M.A. President

Howard B. Fonda, Senior Vice-president of Burroughs Wellcome & Co., (U. S. A.), Inc., was elected president of the American Pharmaceutical Manufacturers Association May 31, at the annual meeting at Colorado Springs. Other officers elected are: Eastern Vice-president, Ronald Helps, Schieffelin & Co.; Central Vice-president, J. H. Flint, Flint Eaton & Co., Western Vice-president, Philip K. Bates, Rexall Drug Company; Treasurer, Fred W. Misch, the Smith-Dorsey Company. Elected to the Executive Committee of the Association were: M. F. Charley, Standard Pharmacal Co.; Parker H. Heath, Irwin Neisler & Co.; Ray A. Johns, Kremers-Urban Company; Dr. F. G. Klumpp, Winthrop Stearns; O. B. Newton Jr., C. B. Fleet Co.; and Kenneth F. Valentine, president of Pitman-Moore Co.

HOWARD B. FONDA

### Names Four New Vice-Presidents

Dr. Merrill C. Hart retired as vice-president and director of research of the Upjohn Co. last month, according to Donald S. Gilmore, president and general manager and was succeeded by Dr. Richard S. Schrieber. At the same board meeting, D. Gordon Knapp, treasurer, was elected to fill a vice-presidency vacancy since 1947, former Upjohn General Council Leslie D. Harrop was moved up to fill the newly created position of vice-president and general counsel, and personnel director Harry E. Turbeville was named vice-president and director of personnel.

### Join Chilcott Laboratories

William T. Strauss, M.D., has joined Chilcott Laboratories, division of the Maltine Company, as medical director, and Clarence W. Sondern, Ph.D., has assumed the position of director of quality control. Dr. Strauss will be concerned with the development and supervision of clinical trials.

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### Jinx Falkenberg Guest of CIBS

Jinx Falkenberg, of radio and newspaper fame, and Hans Groenhoff, aviation and fashion color photographer, were the guests of honor of the Cosmetic Industry Buyers & Suppliers Association at the May luncheon. Miss Falkenberg talked on her experiences while entertaining soldiers in the China-Burma area during the war. Mr. Groenhoff, recently appointed director of Colonial Airline's picture service bureau, exhibited several aviation photographs and fashion pictures.

Many of the outstanding ladies of the cosmetic industry attended the association luncheon as guests of members.

Among the guests attending CIBS luncheon were, left to right, Ardith Merritt, Colonial Airline Hostess; Jinx Falkenberg; and Hans Groenhoff, (extreme right) photographer, who are explaining aerial photo to CIBS president, Paul Alexander, Drug & Cosmetic Industry.

### Dr. Smith Named Honorary Member

The Society of Cosmetic Chemists extended an honorary membership to Dr. Austin Smith, editor of the Journal of the American Medical Association, at its semi-annual technical meeting at the Savoy-Plaza Hotel last month. Dr. Theodore Rider, president of the society and director of research, Lever Brothers Co., made the presentation, while Dr. Howard Behrman, assistant professor of clinical dermatology, N. Y. U. College of Medicine, delivered the Honorary Membership Award address.

### Warner-Hudnut Plant to Open

Warner-Hudnut will formally dedicate its new Pacific Coast headquarters at 2340 Eastern Ave., Los Angeles, on June 26. Elmer H. Bobst, president; Robert J. Davis, executive vice-president and director; and Charles A. Pennock president of the Hudnut Sales Company, will travel from New York for the occasion to join Henry R. Herold, vice-president in charge of West Coast operations, in attending the ceremonies.

The new $500,000 plant is the first structure to be completed in the world-wide building phase of Warner-Hudnut's domestic and foreign expansion plans. This structure will house sales distribution and warehousing staffs and facilities.

### Whittier Div. Forms Corporation

The partnership of Whittier Laboratories, division Nutrition Research Laboratories, was incorporated as an Illinois corporation, to be known as Whittier Laboratories, division Nutrition Research Laboratories, Inc. The officers of the corporation are Leo C. Hoffman, president and director; Vergne L. Hoffman, vice-president and director; and Casimir V. Wejman, secretary-treasurer and director.

### Plaut Receives Alumni Award

Edward Plaut, president of Lehn & Fink Products Corporation, and chairman of the board of Dorothy Gray, Ltd., received the first annual Alumni Award presented by the Alumni Association of the College of Pharmacy, Columbia University, to graduates who have rendered distinguished service to the college. He received a bronze plaque at a dinner and dance held at the Waldorf-Astoria Hotel last month.

DR. EDWARD PLAUT

Alumni Awards were also given to Gustavus A. Pfeiffer, Wm. R. Warner & Company, Inc., and to George Simon, Heyden Chemical Corporation, both men having previously retired.

### In the Legion of Honor

Paul Marin, director of the Establishment of Charabot and Company, has been nominated to the grade of Chevalier of the Legion of Honor. A veteran of two wars, this distinction has been conferred on Captain Marin for Military title.

### Zuckerman Receives Doctor's Degree

Sam Zuckerman, assistant research director, H. Kohnstamm & Co., received a Doctor's Degree in chemistry from Polytechnic Institute of Brooklyn. He has been associated with Kohnstamm for the past 14 years, devoting his time to the research and manufacture of certified colors and flavors for the food and cosmetic industries.

DR. SAM ZUCKERMAN

In 1937 Dr. Zuckerman received his B.Sc. from C. C. N. Y. and attended the Polytechnic Institute of Brooklyn in the evening where he received his Master's Degree in Science in 1942. He is a member of the American Chemical Society and the Society of Cosmetic Chemists.

### Named to Ansbacher-Siegle Staff

Arthur W. LaCouture has been added to the New England sales staff of Ansbacher-Siegle Corp. and Otto William Sommerhalter has been assigned to the Chicago office from which he will cover the Middle West territory.

# the most highly purified monoglycerides on the market

# MYVEROL

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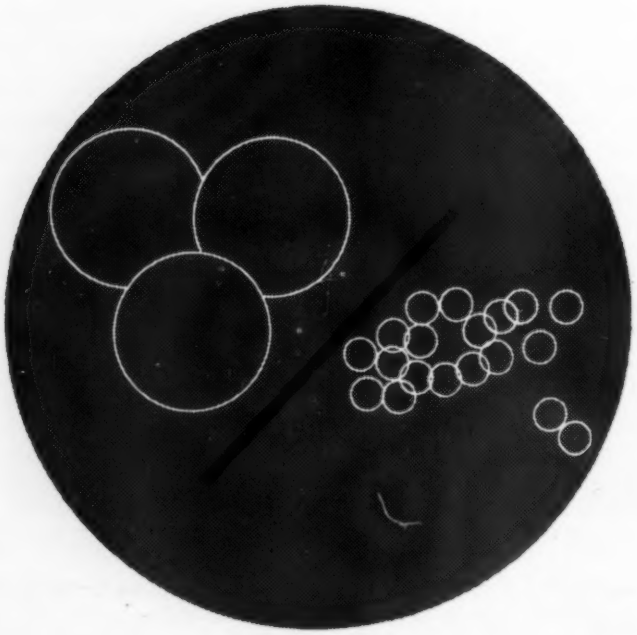

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A plastic fat made from refined cottonseed oil.

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A flaked solid glyceryl monostearate.

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***Distillers of Oil-Soluble Vitamins and Other Concentrates for Science and Industry; Manufacturers of High Vacuum Equipment***

### Berg With Calco

Frantz F. Berg has joined the Calco Pharmaceutical Department as associate director of pharmaceutical application, in which capacity he will deal with the technical service program of the

FRANTZ F. BERG

pharmaceutical sales department. He was formerly manager of Pharmaceutical Laboratories and technical director for quality control of E. R. Squibb & Sons.

### Polak's Frutal Moves Offices

The general and executive offices of Polak's Frutal Works were moved from Long Island City to Middletown, New York, the present location of their plant. This step has been brought about by the steady growth of the concern since its establishment in 1921 as a sales organization for its parent company in Amersfoort, Holland. The entire organization is being centralized in Middletown, where an additional large modern building has just been completed.

### Given Special Luncheon

H. Gregory Thomas, president of Chanel, Inc., was given a luncheon on May 11, on the occasion of his wedding, by the members of the board of directors of the Toilet Goods Association, members of the Perfumery Importers Association, and by some of his business associates. Gerard J. Danco acted as master of ceremonies.

### Imperial Chem. Represents MM&R

Magnus, Mabee & Reynard, Inc. has appointed Imperial Chemical Industries Ltd. to represent them in India, Pakistan and Burma. The representation in India will be by Imperial Chemical Industries (India) Ltd., for Calcutta, Bombay, Madras, Delhi, Pakistan and Burma; and by Imperial Chemical Industries (Export) Ltd., for Karachi and Rangoon.

### Named Research Analyst

Walter E. Boek has been appointed chief research analyst of the Health Information Foundation, according to Admiral William H. P. Blandy, president.

WALTER E. BOEK

### New Plant Produces Methocel

A new Midland plant of the Dow Chemical Company has begun large-scale production of powdered methocel, (Dow methylcellulose) which, according to the company, represents the first quantity of material produced in a powdered form on a commercial scale in this country or abroad.

### Van Ameringen Buffet Supper

Van Ameringen-Haebler, Inc. held a buffet supper on the second day of the T.G.A. Convention last month in the Embassy and Trianon Rooms of the Ambassador Hotel.

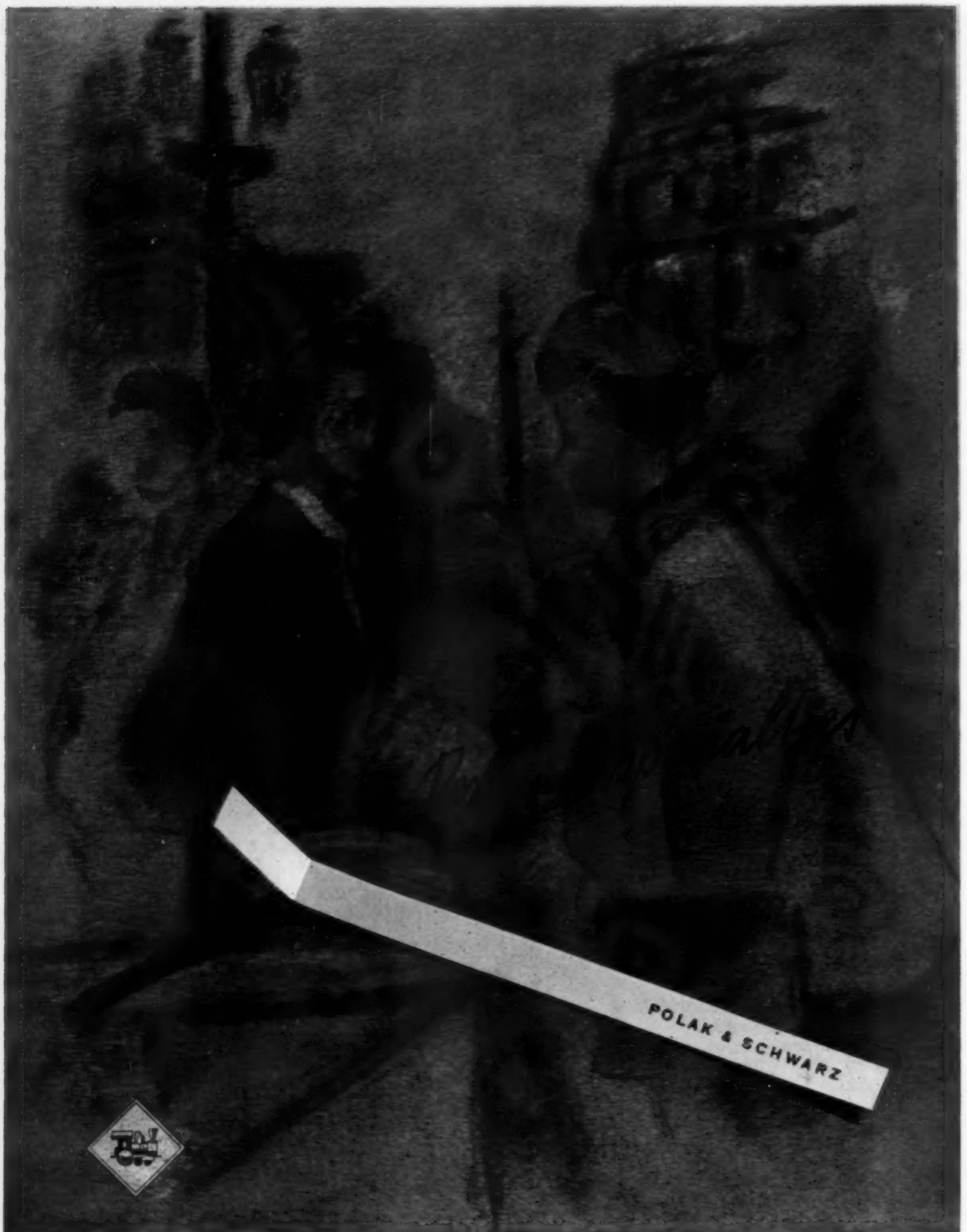
### Health Foundation Elections

At the first annual meeting of the Health Information Foundation last month, the following were elected officers: John G. Searle, president, G. D. Searle & Co., chairman of the board; Admiral Blandy, president; Kenneth Williamson, secretary; S. B. Penick, Sr., chairman of the board, S. B. Penick & Co., treasurer; W. L. Dempsey, president, Sharp & Dohme, Inc., vice-president; James Hill, Jr., chairman of the board and president, Sterling Drug Co., vice-president; George F. Smith, president, John & Johnson, vice-president; Dr. Franklyn Bliss Snyder, president-emeritus, Northwestern University, vice-president; and Norman H. Pritchard, Montgomery Hart Pritchard & Herriott, Chicago, counsel.

The following were elected to the executive committee: John W. Dargavel, executive secretary, National Association of Retail Druggists; Mr. Dempsey; Mr. Hill; James J. Kerrigan, vice-president, Merck & Co., Dr. E. L. Newcomb, executive vice-president, National Wholesale Druggists Association; Carleton H. Palmer, chairman of the board, E. R. Squibb & Sons; Mr. Penick; Earl S. Retter, vice-president, Eli Lilly & Co.; Mr. Searle and Mr. Smith.

Admiral Blandy announced to the board that an outline for a plan of community health study is being drafted under the direction of Walter E. Boek, who was recently appointed chief research analyst of the Foundation.

Signing the agreement between Magnus, Mabee & Reynard, Inc. and Imperial Chemical Industries Ltd., which is representing the former in India, Pakistan, and Burma, is (seated, left) E. J. Barnsley, president of Imperial Chemical Industries (New York) Ltd., with Percy C. Magnus (seated, right) president of Magnus, Mabee & Reynard, Inc. Standing, left to right, are John G. Turnbull, attorney, George H. McGlynn, treasurer, and Robert B. Magnus, vice-president of Magnus, Mabee & Reynard, Inc.; H. S. Maclean, sales manager, Imperial Chemical Industries (New York) Ltd.; J. B. Magnus, MM&R president; R. T. Holder, vice-president Imperial Chemical Industries (New York) Ltd.; Shockley C. Ganage, vice-president, and Dr. Henri F. Logeher, export manager of Magnus, Mabee & Reynard, Inc.




PERFUMERY SPECIALTIES - ESSENTIAL OILS - AROMATIC CHEMICALS

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## Schering Expands Field Staff

Schering Corporation has added eleven new professional service representatives to its staff, according to Francis C. Brown, president. Seven of the new representatives have been assigned to the domestic sales division for service in various territories throughout the country. They have completed an intensive five weeks' training course in scientific and technical fields and in professional service under the direction of Herman W. Leitzow, Schering domestic sales manager, and George C. Straayer, professional Service manager. Four new representatives of the Schering international division also completed the training course.

New Schering professional service representatives who have completed their training period at the home offices. Left to right (Back Row): Jack Hinchman, Sacramento; John S. Payne, Minneapolis; Charles J. Emerick, Portland, Orgeon; Herold S. Wry, Moncton, New Brunswick, Canada; Louis Blazic, Cleveland; and Benjamin A. Robinson, Buenos Aires. Front row: Earl L. Langley, London, Ontario, Canada; David D. Withrow, Forest Hills, New York; Richard K. Bird, Poughkeepsie, New York; Charles S. Todd, Jr., Atlanta; and Jerry N. Beck, Long Beach, California.

## Stanton Labs. Open New Plant

Stanton Laboratories, Inc. opened their new plant in Bristol, Penna. last month, when they began full production in the thio manufacturing line. A completely instrument-controlled, continuous process method of manufacture, employing the most advanced and efficient method of vacuum distillation, is said to insure a uniform standard of purity and increase production capacities. Stanton Laboratories will have available for the cold permanent wave trade distilled thioglycolic acid, ammonium thioglycolate, and sodium thioglycolate.

## Lever Promotes Schaack

Harry C. Schaack has been promoted from divisional sales manager at St. Louis to national syndicate sales manager of the Pepsodent division of Lever Brothers Company, according to Charles T. Lipscomb, Jr., president. He will be succeeded as St. Louis sales manager by Floyd C. Bradley, who has been sales supervisor there.

HARRY C. SCHAACK

## Plax Corp. Moves N. Y. Office

Plax Corporation of Hartford, Conn., has moved its New York office from 415 Lexington Ave. to International Building, 630 Fifth Ave.

## Fragrance Foundation Elections

Oscar Kolin of Helena Rubinstein, Inc., was elected president of the Fragrance Foundation at the annual meeting on May 18, and H. Gregory Thomas was elected vice-president. Pierre Harang of Houbigant Sales Corp. was named treasurer, while A. L. van Ameringen of van Ameringen-Haebler, Inc. was re-elected to the post of secretary. These officers will serve for one year.

OSCAR KOLIN

Elected as directors for 3-year terms were Benson Storfer of Parfums Corday, Inc. and H. L. Brooks of Alexandra de Markoff Sales, who was re-elected on the expiration of a one-year term. J. S. Wiedhopf, Parfums Ciro, Inc., was elected to a 2-year term to finish the directorship of Pierre Harang, and Samuel Rubin of Faberge, Inc., was elected to a 1-year term to finish that of H. Gregory Thomas. Those members of the board who were previously elected and who will retain those offices are Jean Despres, Coty, Inc.; J. I. Poses, D'Orsay Sales Corp.; Paul B. Russell, Lucien Lelong, Inc.; and Frazer V. Sinclair, BEAUTY FASHION.

In accordance with the by-laws of the Fragrance Foundation, the president and executive vice-president of the Toilet Goods Association are automatically members of the board of directors. In addition to the above-named directors, therefore, the following members are included: Joseph Keho, president of Dorothy Gray, Ltd., and president of the Toilet Goods Association, and S. L. Mayham, executive vice-president of the association.

## Named to Academy of Sciences

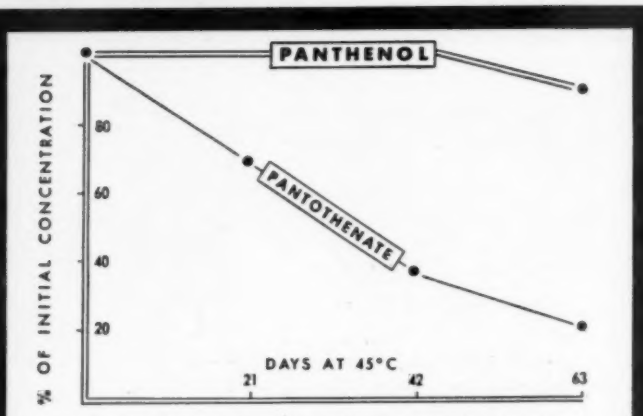
Dr. Oskar Wintersteiner, member of the Squibb Institute for medical research, and director of the division of organic chemistry of the Research and Development Laboratories of E. R. Squibb & Son, was recently elected to the National Academy of Sciences.

## Dr. Webb with Upjohn

Joseph P. Webb M.D., has been appointed to the medical division of the Upjohn Company in the department of clinical investigation, according to Dr. E. Gifford Upjohn, medical director.

# PANTHENOL

## Better STABILITY in VITRO




A comparison of the relative stability of panthenol and a pantothenate in a liquid multivitamin preparation of pH4. Data from Rubin; J. Am. Pharma. Assn. (Sci. Ed.) XXXVII, 12, 1948.

"The results (in humans) show that with increasing dosage of the 2 compounds, pantothenyl alcohol (panthenol) shows increasingly superior availability when taken together with food." (1)

"These results (in rats) confirm and extend the previous findings in humans that the availability of panthenol is better than that of calcium pantothenate under conditions of ad libitum feeding, and is more nearly equal in the post-absorptive state at lower doses." (2)

## Better AVAILABILITY in VIVO


(1) Rubin, et. al.; Journal of Nutrition, 35: 499, 1948

(2) Rubin, et. al.; Federation Proceedings, 8: 1, 1949 (J. Nutrition, 40: 265, 1950)

The better physiological availability of panthenol 'Roche' gives your product another plus in the competition for physicians' recommendations.

The better stability of panthenol 'Roche' means lower costs due to the need for lower manufacturing excesses.

All panthenol 'Roche' is packed in seamless aluminum bottles.

Now is the time to get all the facts about panthenol 'Roche'. Call or write the 'Roche' Vitamin Division.

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**HOFFMANN-LA ROCHE INC.**
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NUtley 2-5000

In Canada:
Hoffmann-La Roche, Ltd., Montreal, Que.

## Kerrigan Elected Merck President

James J. Kerrigan was elected president of Merck & Co., Inc., at a meeting of the board of directors in May, and succeeds George W. Merck who will continue as chairman of the board. At the same time Henry W. Johnstone was elected senior vice-president.

Mr. Merck, son of the company's founder, George Merck, joined the company in 1914 and has been president since 1925. Mr. Kerrigan joined the Merck organization in 1907, spending much of his career in the commercial phases of the company's operations, and has been a vice-president since 1927. He is a director of Merck & Co., Inc. and a director and vice-president of Merck & Co. Limited. Mr. Johnstone joined the company in 1930, becoming plant manager the following year and vice-president in charge of operations in 1936.

JAMES J. KERRIGAN

HENRY W. JOHNSTONE

## U. S. Bottlers Adds Office

U. S. Bottlers Machinery Company has added another office at 925 Solomon Ave., North, New Orleans, according to R. P. Anderson Company, Texas representative. K. G. Anderson will be in charge of this office, while Louis L. Keeler will represent the company at 112 East Greenwood Ave., Lansdowne, Penna.

Dr. J. M. Dille, (second from left) chairman of the Ebert Prize Committee of the American Pharmaceutical Association, presenting the Ebert award to Dr. Rudolph H. Blythe, head of the research pharmaceutical chemistry section of Smith, Kline & French Laboratories, May 4, at the general session of the A. Ph. A. convention in the Hotel Traymore, Atlantic City. Dr. Harlan H. Tuthill, SKF plant technical director, left, and John J. Gulesich, right, SKF senior pharmaceutical chemist, co-authors of Dr. Blythe's prize-winning research paper were also honored.

## Named Mgr. by Kimble Glass

Ted Anderson has been named manager of the New York sales office of Kimble Glass, division of Owens-Illinois Glass Company, according to K. G. Hewitt, Kimble Glass Container & Accessories division sales manager. Mr. Anderson is succeeding R. O. Hereford who recently resigned.

TED ANDERSON

Also announced was the promotion of I. R. Norton to service manager of the New York branch. Edward T. Derr, formerly of the Vineland, N. J. plant has replaced Mr. Norton in the Kimble Glass Sales and service control division in Toledo.

## Heyden Corp. Appoints King

Douglas J. King has been appointed to the position of assistant to Q. S. Ball, manager of the professional products division, Heyden Chemical Corporation. Mr. King will be concerned with the sales and merchandising of Heyden penicillin and streptomycin.

## Schering Appointments

David D. Withrow has been appointed to a staff position in charge of special product marketing in the domestic sales division, according to Dr. John M. McDonnell, vice-president of Schering Corporation.

At the same time a number of promotional appointments in the company's domestic sales division were announced by Francis C. Brown, president. Emanuel E. de Gomar, Jr., has been raised to the position of southern division supervisor; George E. Hlavin, until recently supervisor of the east central district of the central division, has been promoted to the position of assistant professional service manager; and Floyd G. Chambers, Leo C. Brown, Ralph C. Najarian, Herbert A. Lohrman, and Arthur A. Schmidt have been appointed district supervisors.

## McWhorter Promoted by Owens-Ill.

W. E. McWhorter has been promoted to advertising manager of the Kimble Glass division, Owens-Illinois Glass Company, and American Structural Products Company, a subsidiary, according to Harlan Hobbs, Kimble and American Structural sales promotion manager.

## Sets Up Laboratories

Michael A. Stanton, consulting chemist, has announced the establishment of his laboratories specializing in research and development for the chemical and cosmetic industries at 340 South Fifteenth Street, Philadelphia. The telephone is Kingsley 5-7995.

Heyden

# CHLORINATED COMPOUNDS

Intermediates of outstanding value in the production of dyes, pharmaceuticals, essential oils, fungicides and other organic chemicals.

**CHLORINATED BENZALDEHYDES**
Ortho-Chlorobenzaldehyde
Para-Chlorobenzaldehyde
2,4-Dichlorobenzaldehyde
3,4-Dichlorobenzaldehyde

**CHLORINATED BENZOIC ACIDS**
Ortho-Chlorobenzoic Acid
Para-Chlorobenzoic Acid
2,4-Dichlorobenzoic Acid
3,4-Dichlorobenzoic Acid

**CHLORINATED TOLUENES**
Ortho-Chlorotoluene
Para-Chlorotoluene
2,4-Dichlorotoluene
3,4-Dichlorotoluene

**CHLORINATED BENZOYL CHLORIDES**
Benzoyl Chloride
Ortho-Chlorobenzoyl Chloride
Para-Chlorobenzoyl Chloride
2,4-Dichlorobenzoyl Chloride
3,4-Dichlorobenzoyl Chloride
Anisoyl Chloride
(Para-Methoxybenzoyl Chloride)

**CHLORINATED BENZOTRICHLORIDES**
Benzotrichloride
Ortho-Chlorobenzotrichloride
Para-Chlorobenzotrichloride
2,4-Dichlorobenzotrichloride
3,4-Dichlorobenzotrichloride

**CHLORINATED BENZYL CHLORIDES**
Benzyl Chloride
Ortho-Chlorobenzyl Chloride
Para-Chlorobenzyl Chloride
2,4-Dichlorobenzyl Chloride
3,4-Dichlorobenzyl Chloride

*Technical literature and samples will be mailed promptly upon request on Company letterhead.*

FINE HEYDEN CHEMICALS

**HEYDEN**
**CHEMICAL CORPORATION**
342 SEVENTH AVENUE, NEW YORK 1, N.Y.
Chicago 6 • Philadelphia 3 • San Francisco 11 • Detroit 1 • Cleveland 16, O.
SERVING INDUSTRY THROUGH CHEMISTRY

Benzaldehyde • Benzoates • Benzyl Chloride • Bromides • Chlorinated Aromatics • Creosotes • Formaldehyde • Formic Acid • Glycerophosphates Guaiacols • Hexamethylenetetramine • Medicinal Colloids • Methylene Disalicylic Acid • Paraformaldehyde • Parahydroxybenzoates • Penicillin Pentaerythritols • Propyl Gallate • Quadrafos • Resorcinol • Salicylates Salicylic Acid • Streptomycin

### Continental Can Promotes

T. C. Fogarty, formerly vice-president in charge of sales, Continental Can Company, has been appointed executive vice-president of the metal division, directly responsible to Hans A. Eggerss, president. Additional promotions announced by the board of directors include: Reuben L. Perin (Eastern division), formerly general sales manager; William M. Cameron, formerly central division sales manager; and Sherlock McKewen (Pacific division), formerly secretary and treasurer, all of whom have been named to the newly created posts of division vice-presidents. Loren R. Dodson, formerly assistant secretary and assistant treasurer, has been named secretary and treasurer.

T. C. FOGARTY

### Demont Named Chief Chemist

Dr. Michel Demont has been appointed chief chemist of the recently acquired chemical laboratories of Fleuroma, Inc. The laboratories, formerly Demont Laboratories, Inc., will continue to operate at their present location, 155 Waverly Place, New York, as a division of Fleuroma, Inc., while the offices and perfume laboratory remain at 73 Sullivan Street.

According to a statement by Emanuel Poons, general manager, the operations of the new laboratories have been completely integrated with the current activities of the company. Rupert C. Watson continues to direct the sales department of the expanded Fleuroma interests.

### Dr. Haagen-Smit Honored by Dinner

Dr. Airie Jan Haagen-Smit, professor of bio-organic chemistry in the biology division of the California Institute of Technology, and recent winner of this year's annual Fritzsche Award, was the guest of honor at a dinner tendered by F. H. Leonhardt, Fritzsche president.

### Appointed by Commercial Solvents

Dr. Sylvan B. Lee, formerly assistant director of microbiological research and development for Merck & Co., has been appointed director of microbiological research of Commercial Solvents Corp., according to T. S. Carswell, vice-president in charge of research and development.

DR. SYLVAN B. LEE

### Eli Lilly to Retire

Eli Lilly, chairman of the board of Eli Lilly & Co., has announced his retirement from active service after forty-three years in the company. The announcement was made prior to a reception and banquet in honor of retiring employees and in honor of those who had served the company for twenty-five or more years.

### Visits Geneva Office

Edward F. Morrish, technical director of the perfumery division of Firmenich & Co., recently returned from a month's stay at the firm's Geneva, Switzerland, office.

### Groh Named Executive V.P.

Henry Groh has been elected executive vice-president of the Oxzyn Company.

### T.G.A. Forms Special Committee

Joseph Keho, president of the Toilet Goods Association, announced late last month the appointment of a special committee to study the advisability of expanding the activities of the association to include general public relations on behalf of the industry and industry products. The committee will also consider special promotions on behalf of highly specialized segments of the industry.

Norman F. Dahl, Bourjois, Inc., chairman of the committee, will be assisted by H. L. Brooks, Alexandra de Markoff Sales Corp.; Mrs. Muriel Bell, Muriel Bell, Inc.; J. I. Poses of D'Orsay Sales Co.; C. A. Pennock, Hudnut Sales Co., Inc.; J. S. Wiedhopf, Parfums Ciro, Inc.; and Robert P. Johns of Jacqueline Cochran, Inc. The committee will report its findings to the board of directors.

### 100 Years for H. J. Baker

H. J. Baker & Bro. is this year celebrating its 100th anniversary as an importer, exporter and distributor of heavy chemicals, feeding and fertilizer materials. Forerunner of the Baker organization was Baker Brothers & Co., Baltimore, which was started in 1842 by Henry J. and Charles J. Baker in the paint, oil and glass business, and for the importation of French glass and chemicals. H. J. Baker went to New York while Charles remained in Baltimore.

### Verona Chem. Sole Distributor

Verona Chemical Company has secured the sole distribution in the United States of the line of natural products, essential oils, resinoids and absolutes produced by J. & E. Sozio of Grasse, France. Stocks of Sozio products will be available at the Verona Plant, 26 Verona Ave., Newark, N. J.

Attending dinner given by F. H. Leonhardt, president of Fritzsche Brothers, Inc., on behalf of Fritzsche Award winner, Dr. A. J. Haagen-Smit, are, (seated) left to right: John L. Cassullo, Dr. Ernest Guenther, Dr. Haagen-Smit, Mr. Leonhardt, John H. Montgomery and H. P. Wesemann. Standing: R. W. Wilmer, G. A. Wohlfort, E. E. Langenau, B. F. Zimmer, Dr. E. H. Hamann, Fred H. Leonhardt, Jr., Fred L. Hilbert, Dr. A. Althausen and D. A. Neary.

*For that "extra touch" that brings perfection*

**PENN-DRAKE SPECIALIZED SERVICE** *will follow your exact specifications*

When a "standard" petroleum product won't do the job . . . *write your own specifications*, and Penn-Drake will follow them exactly.

Penn-Drake Specialized Service can give you petroleum products with special qualities—petrolatums that have melting points, colors, penetration to meet your needs; white oils with special pour points and viscosities. *Your exact specifications are followed every time.* This assures you of dependable uniformity with each order.

In addition to the specialized products, Penn-Drake offers a complete line of highest quality *standard* petroleum products, including white oils, petrolatums, deodorized insecticide bases, petroleum sulfonates, naphthas, waxes, industrial and motor lubricants and greases, and fuel oils.

In 75 years of experience Penn-Drake has learned the importance of extra care. This extra care in refining the best of crude petroleum stocks is responsible for the perfect purity, the permanent purity that is so vital to your drug and cosmetic products.

**PENNSYLVANIA REFINING COMPANY**

**GENERAL OFFICES: BUTLER, PENNSYLVANIA**

**Refinery at KARNS CITY, PENNSYLVANIA**

**Branches: Cleveland, Ohio; Edgewater, N. J.** ***Representatives in Principal Cities***

**MAKERS White Oils (U.S.P. and Technical); Petrolatums (all grades and colors); INSECTI-SOL (deodorized insecticide base); Deodorized and other Naphthas; Petroleum Sulfonates; Waxes; Industrial and Motor Lubricants and Greases; Fuel Oils, and other petroleum products.**

penn drake products

### Dedicate Sterling-Winthrop Inst.

The Sterling-Winthrop Research Institute in Rensselaer was officially dedicated on May 17, following the birth of a 9-pound baby in the Albany hospital, whose first cry through broadcast soundwaves started a motor which raised a curtain placed in front of the building's main entrance. Dr. Maurice L. Tainter, director of the Institute, presented the baby of Mr. and Mrs. William P. Cain, Albany, with a scholarship to be used in any college when the appropriate time arrives.

James Hill, Jr., president of Sterling Drug Inc., dedicated the building to the advancement of human welfare. Following the dedication, scientific symposia on medical research in the second half of the 20th century were presented, including three Nobel prize winners as speakers, Dr. Rene Dubos, Rockefeller Institute of Medical Research; Professor Otto Loewi, New York University; and Dr. Albert Szent-Gyorgyi. Dr. Theodore G. Klumpp, Winthrop-Stearns president, also addressed the group.

New laboratory building of the Sterling-Winthrop Research Institute which was dedicated at ceremonies on May 17 and 18, located on a 70-acre site, overlooking Albany and the Hudson River. Center wing is the administration building, flanked by chemical and biological sections. The 60-odd laboratories, some double, others single, include a two-story chemical development laboratory and a completely isolated air-locked virus section.

### Foreman With Special Milk Prods.

Dr. E. Leon Foreman has joined S. M. Pharmaceuticals division of Special Milk Products, Inc., Los Angeles, as

DR. E. LEON FOREMAN

research director in charge of new product development and all laboratories. He was formerly director of research at Lakeside Laboratories.

### Boudeman Appointed by Upjohn

R. M. Boudeman has been appointed office manager of the Upjohn Export Branch, succeeding R. G. White in the position. Mr. White has been transferred to export sales and will be in charge of English export.

### Appointed by Bauer & Black

A. J. Hawkes and L. E. Uhler have been appointed merchandising managers for consumer surgical dressing and elastic goods by Bauer & Black.

### Named Directors of Amer. Potash

John Paul Remensnyder, president of Heyden Chemical Corporation, and Ralph N. Lulek and Simon Askin, both vice-presidents and directors of that corporation, have joined the board of directors of American Potash & Chemical Corporation, according to Peter Colefax, president of the latter.

### 25 Years with the Arner Co.

Charles W. P. Atkinson, vice-president and treasurer, and Roy H. Clark, chief chemist of the Arner Co., have been awarded gold watches in recognition of their twenty-five years of service with the company. Dr. Niels C. Klendshoj, executive vice-president presented the awards.

### Pulva Names Representative

The Pulva Corporation, Perth Amboy, New Jersey, has appointed Williams Sales Company, 514 Wyoming Ave., Cincinnati, as its exclusive representative covering Ohio, Michigan, Kentucky, West Virginia and Western Pennsylvania.

### Messtorff Visits New York

Heinz Messtorff, general manager of Empresa Importadora, S. A., with offices in Mexico City, sole distributors of essential oils, perfuming and flavoring specialties for Fritzsche Brothers, Inc., visited the firm's New York offices last month.

### Bower Returns to Milkmaid, Inc.

Maxwell Bower has returned to the position of sales manager of Milkmaid, Inc., a position he previously held for ten years, according to Mrs. John D. Burger, president.

### Mallinckrodt Appoints Claspill

James J. Claspill has been appointed sales representative of Mallinckrodt Chemical Works in the Kansas City area, succeeding E. W. Michaels. He previously represented the company in the St. Louis and Chicago Territories.

### Pampel Leaves Heine & Co.

Dr. C. W. Pampel, for 37 years with the firm of Heine & Co., A. G., Lepizig, as chief of that company's perfume department, moved to the Western Zone of Germany to take full control of the Perfumery Department of Dragoco at Holzminden.

### Berje Products Reorganizes

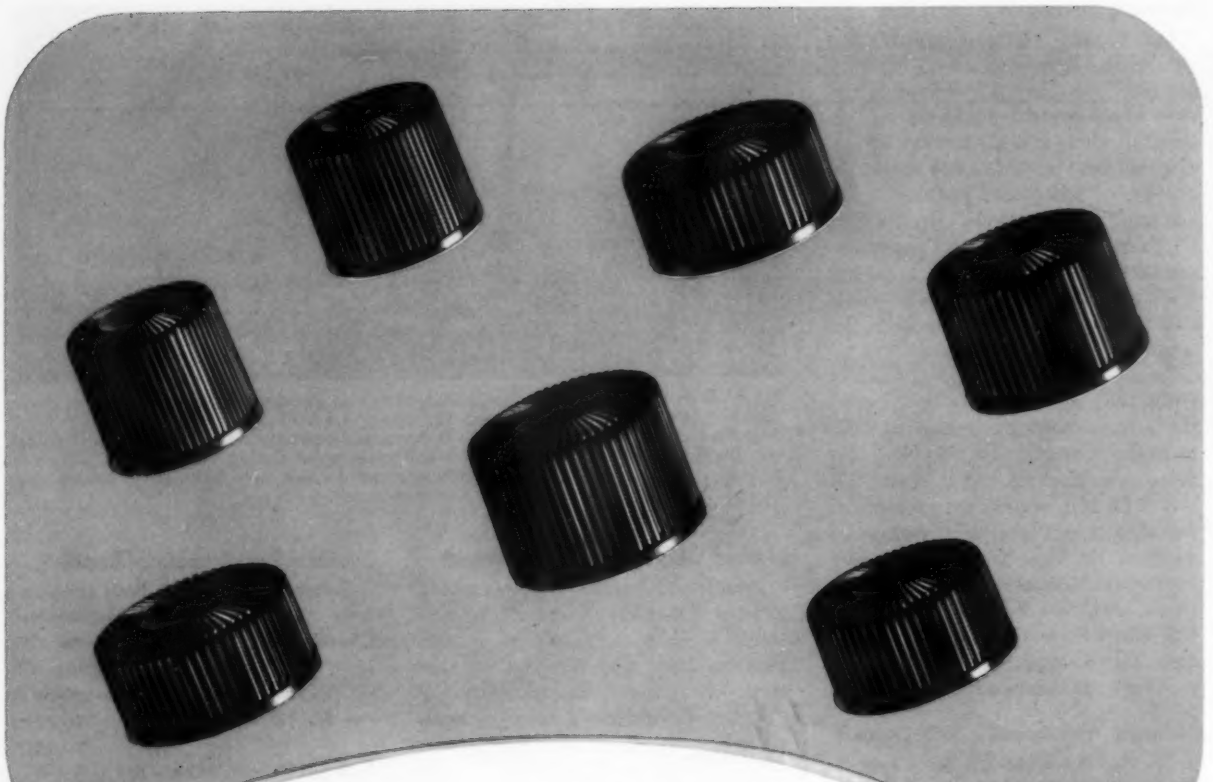
Berje Products Company has been reorganized under the name of Berje Chemical Products, Inc. and is now located at 359 West Broadway in new offices and laboratories. J. L. Bleimann was elected president by the board of directors.

### Promoted by Matchabelli

Miss Lee Johnson has been promoted to the position of supervisor of retail sales personnel of Prince Matchabelli, Inc., according to H. Robert Marschalk, president. She will succeed Helen Thompson who resigned to join the merchandising staff of Vogue Magazine.

### Booklet on Packaging

The Hinde & Dauch Paper Company, Sandusky, Ohio, has published a 24-page illustrated book entitled "Package Engineering," featuring a detailed study of the technical aspects of corrugated box design and construction. This booklet is available on request to the company.



# Private Molds?

# No—They're K-Design Caps

Many people think that Armstrong's K-Design Caps are private molds the first time they see them. These pictures will help to explain why.

K-Design Caps are as distinctive as private molds. They perform just as well. They're made to rigid dimensions. And—they're very reasonable in cost.

You can get these stock mold caps in many brilliant, non-fading colors. Sizes range from 8 to 22 mm. Short skirts, KS; 8, 10, 13, 15, and 18 mm. Medium skirts, KM; 18, 20, and 22 mm. Long skirts, KL; 13 and 15 mm. Additional sizes will be produced soon. Your Armstrong representative can show you samples, prices. If you want more information, write Armstrong Cork Company, Glass and Closure Division, 1906 Prince Street, Lancaster, Penna.

**ARMSTRONG'S**
***Artmold***
**PLASTIC CAPS**

WEST COAST REPRESENTATIVE:
I. F. SCHNIER CO., INC.
SAN FRANCISCO 7 AND LOS ANGELES 12

### Stange Appoints Liddell

George Liddell has been appointed sales representative of the Wisconsin-Minnesota area of Wm. J. Stange Co., according to Wm. B. Durling, president. He will replace Bill Kimball who has been transferred to the New England territory, while the former New England representative, S. L. Hutchison, is being returned to the Chicago office to handle specially assigned accounts in that area. Mr. Liddell had previously been manager of the midwestern division of Polak & Schwarz and assistant manager of Magnus, Mabee & Reynard, respectively.

GEORGE LIDDELL

### Sobel With Bio-Science Labs.

Charles Sobel, formerly senior chemist with the Department of Health, Chicago, has been added to the staff of Bio-Science Laboratories.

### Weber Promoted by McKesson

John J. Weber, formerly district drug sales manager of the mid-west region, has been promoted to drug sales manager of McKesson & Robbins, Inc., according to Herman C. Nolen, vice-president in charge of drug merchandising. He will be Mr. Nolen's chief executive assistant in all matters relating to the sale of drugs and sundries.

JOHN J. WEBER

### Cheston Named SKF Director

Morris Cheston, a partner of the law firm of Ballard, Spahr, Andrews & Ingersoll, was elected a director of Smith, Kline & French Laboratories at the annual stockholders' meeting last month. He will fill the vacancy created by the death of Lester B. Johnson in 1948.

Members attending sixth annual meeting of the Bristol-Myers Quarter Century Club at the Warwick Hotel last month. Standing, left to right: Sol Rettino, Charlie Lauterbach, George Nagel, Blanche Lozier Bellis, Richard Haupt, Al Corsano, Mae Giegerich Wells, Earl Means, Vrooman Freer, Landon Burbage, Lee H. Bristol, President, Kelly Capenegro, Jom Devlin, Leo Brosky, Paul Kronicz, and Laura Napier. Seated, second row: Eva Goshawk Fawcett, Mary Gibson Thompson, Rose Spero, Rene Dixon, Margaret Curran; front row, Henry P. Bristol, John Kelly, Fred Clemmensen, Bill Springer, and Spencer Hodge.

### Parfums Charbert Purchased

Jacquilane Cochran Cosmetics has purchased Parfums Charbert, Inc. from the estate of the late Herbert H. Harris.

### Frank F. Law

Frank F. Law, vice-president of Wyeth, Inc., died June 5 in University Hospital, Philadelphia. He was 56 years old. Mr. Law, who resided at Collingswood, N. J., was a trustee of Temple University, and was president of the General Alumni Association of Temple from 1942 through 1944. In September 1948, the University awarded him an honorary degree. Mr. Law's widow, three sons, and a daughter survive him.

### Dr. Frederick W. Brown

Dr. Frederick W. Brown, authority on drugs, essential oils, and aromatic chemicals, and vice-president and technical director of D. W. Hutchinson & Co., Inc. for over 16 years, died suddenly on May 21 at Palermo, Maine, at the age of 70. Prior to his association with Hutchinson & Co., Dr. Brown had for 29 years been chief chemist for Magnus, Mabee & Reynard, Inc., and previously, chemist for Schiefflin & Co.

### Samuel W. Frazer

Samuel W. Frazer, former chairman of the Drug, Chemical and Allied Trades Section of the New York Board of Trade, died May 25 in Van Nuys, Calif. at the age of 68. He had been with Burroughs Wellcome & Co. for more than thirty years and retired in 1948, when he and his wife settled in California. Mr. Frazer was a former vice-president of the American Pharmaceutical Manufacturers Association and a trustee of the College of Pharmacy of Columbia University. Surviving are his widow, Mrs. Christine M. Frazer; two sons, James G. and Douglas W. Fraser; a brother, William H. Frazer, and three grandchildren.

### Charles J. A. Fitzsimmons

Charles J. A. Fitzsimmons, chairman of the board of Orbis Products Corporation, died May 30 at New York Hospital at the age of seventy-one. He founded Orbis in 1918 and was its first president. Mr. Fitzsimmons had associations with the National Aniline Dye Corporation and was a member of the Union League and the Drug and Chemical Club. Surviving are his wife, Mrs. Josephine Smith Fitzsimmons; a son, Charles S. Fitzsimmons, and three daughters, Mrs. Robert L. Cahill, Mrs. William M. Meehan and Mrs. James G. Murray, Jr.

# Colton's *NEW* Tableting Equipment

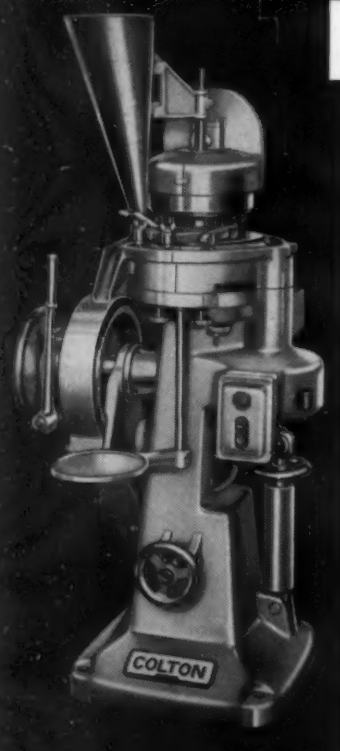
Four new units for the efficient and economical production of tablets.

**1 • GRANULATOR**

**2 • DRYING OVEN**

**1** • New Colton No. 44 Twin Rotor Granulator has double the screen area plus continuous rotary operation, thereby giving 2½ times the capacity of ordinary, oscillating granulators. Delivers to trays, drums, bags. Dustproof. Accessible. Quick-change screens and rotors. Standard or stainless steel.

**2** • Model 1030 takes 10 trays; 2030 takes 20 trays, 30″ x 30″ x 1″. Double steel shell, fully insulated with rock wool. Positive, uniform circulation of air from high-speed fan. Dampered inlet and outlet. All controls outside. Safety latches. Electric, gas or steam heat.

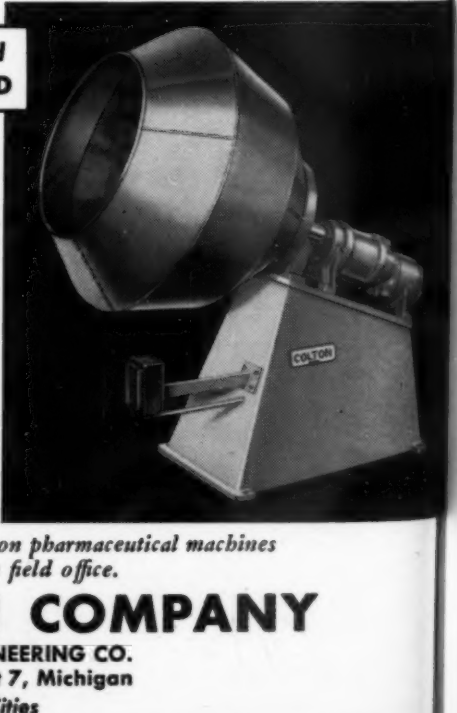



**3 • ROTARY TABLET PRESS**

New Colton No. 216 Rotary Tablet Press makes up to 800 tablets a minute; maximum diameter ⅝″; maximum depth of fill 1¼″; maximum pressure 6000 lbs.; 16 punches and dies, easily changed. Variable speed drive; standard 1 HP motor. Fast, accurate, dustproof.

**4 • COATING *and* POLISHING STAND**

For pans up to 30″, new Colton No. 6; over 30″, new Colton No. 6A Coating Stand. Driven direct from motor through gear reducer; no belts; no slippage under load. Shafts mounted on anti-friction bearings; gears completely enclosed, running in oil. Motors ¾ HP and 1 HP polyphase.




*Write for literature on these and other Colton pharmaceutical machines and name of nearest Colton field office.*

## ARTHUR COLTON COMPANY

**Div. SNYDER TOOL & ENGINEERING CO.**
**3405 E. Lafayette Detroit 7, Michigan**
***Offices in Principal Cities***

***SPECIALISTS IN PHARMACEUTICAL AND PACKAGING MACHINERY FOR OVER 65 YEARS***

# MANAGEMENT FORUM

*By Francis Chilson*
*Industrial Consultant*

**Multi-Storey Modernization (Continued)**

To be strictly logical from a material handling standpoint, the flow in a building of several storeys should be up instead of down. A pallet load of finished goods cased and ready for shipment represents two or more pallet loads of the component materials. Depending upon the shrinkage or wastage of the materials going into the finished product a single pallet load of finished product may represent five or six pallet loads of component materials. Now if your layout plan calls for the storage of all component materials on upper floors, this would mean handling all the individual component materials up into the building and handling them individually down again—and what is worse handling the partially used pallets back again to storage areas—until finally all materials were united on the packaging floor.

In a "reversed gravity" layout the component materials would be stored on lower floors while the packaging department would be on the top floor. Thus the return trip of the materials would be in consolidated form—one pallet instead of five or six. Mind you, I am not recommending such a layout. You'd have a hell of a time selling it to Mr. Big even if you had an array of indisputable figures. The childlike faith most people have in gravity flow has almost become an instinct especially with non technical people.

Yet I did once reverse a layout. I had to because the equipment involved was so heavy that to have supported the upper floors to carry it would have been absurd. This occurred at the plant of the Chattanooga Medicine Co., where now, extraction takes place at ground level; liquids are made and stored at ground level and pumped upstairs as required. Formerly ground drug was blown to the top floor of the stated building and there percolated. Even at that, the floor supporting the old gravity percolators had to be supported with a forest of columns, but the new equipment was several times heavier and so had to be located in the basement. To avoid giving a misleading impression, perhaps I should explain that because the plant of the Chattanooga Medicine Co. is built on the side of a hill, the packaging department, located with reference to the liquid making equipment in a upper storey, delivers directly to the first floor of an adjoining building.

Some people in multiplestorey plants have attempted to make each floor a complete factory; warehousing, manufacturing and packaging of particular classes of products. Thus the powders might be made and packaged on one floor. The creams or ointments on another. The liquids on a third. I have never seen such a layout that appealed to me as efficient. Dividing the packaging operators does not make for efficiency particularly when the volume of the various floor fluctuates. Usually housekeeping is bad and invariably the system breaks down because it is rarely ever possible to so balance the output of the various classes of goods so that each floor will be uniformly loaded. Invariably there must be a supporting warehouse on another floor to absorb overflow inventories from the several floors. This complicates material handling and warehousing not to mention bookkeeping. Because foremen are jealous of their prerogatives and measure the importance of their jobs by the number of people in their departments, you will find in decentralized layouts, not only a lack of flexibility, but an excessive amount of personnel. The foremen have a tendency to "hoard" superfluous people against the time when they may be needed.

With all its drawbacks I have observed no method of laying out a multistorey building, which surpasses consolidation of similar departments. All offices should be consolidated on the topmost floors. All service departments: cafeteria or lunch rooms, locker rooms, on the topmost floors or in the basement if suitable. Warehousing both of finished stock and packaging materials should be on the lower floors below the packaging department while raw materials and the several

Upjohn

tablets Ferrated Liver Concentrate

**THE UPJOHN COMPANY,** Kalamazoo, Michigan, uses Stokes tabletting machines to produce their FERRATED LIVER* Concentrate in tablet form.

"Slugged" first on a Stokes DD-2 tabletting machine, the product goes directly through a mill to produce the granulation which is then run on the Stokes BB-2 tabletting machine. All tabletting operations are carried out in a specially conditioned room (humidity held below 10%) because of the hygroscopic character of powdered liver.

Whether you want tablets by the hundred or the million . . . tablets of accurate weight, uniform density, finest appearance . . . Stokes has the right tabletting machines and proved operating techniques for practical and profitable manufacture. And . . . the necessary auxiliary equipment to assure complete formula success.

Stokes solves tabletting production problems from adaptation of formulae to complete plant layout . . . confidential recommendations are yours for the asking.

Upjohn SLUGS

Upjohn UNCOATED TABLETS

Upjohn COATED TABLETS

*Trademark of The Upjohn Company.

STOKES MAKES Tabletting Machines, Pharmaceutical Equipment, Tube Fillers, Vacuum and Special Processing Equipment, Vacuum Pumps and Gages, Plastics Molding Presses, Water Stills and Special Machinery.

**F. J. STOKES MACHINE COMPANY**

5932 TABOR ROAD

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F. J. Stokes Machine Co.
5932 Tabor Road
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☐ *Please . . . a copy of your 32-page Stokes Pharmaceutical Equipment catalog.*

☐ *Please . . . full information on Stokes carbide-tip punches and carbide-insert dies.*

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____ AT

Stokes carbide-tip punches and carbide-insert dies lengthen tablet tool life. Send coupon for further information.

manufacturing departments should be housed on the floors above packaging.

When several buildings are on the site it may be desirable to specialize each building. Thus one would become entirely a warehouse; another a manufacturing building etc. This would depend upon the location of the buildings with relation to each other; it would depend upon size, type, condition and floor area of each building.

### Sales Consultant

The drug and cosmetic industry is a selling industry by which I mean emphasis is placed on sales to such an extent that the majority of the company heads have come to their present jobs from sales departments. With the logic and necessity of this I concur. One would assume that being a selling industry, the services of sales consultants would be very much in demand. But thus far this has not been the case. Many if not most firms rely upon advice given gratis by their advertising agencies, all of which have an axe to grind, namely to keep the account and if they haven't got it to get it. Relying upon such advice is often like relying upon the consulting advice given for free by many of the packaging machinery companies. It "ain't" worth much. A cold blooded unbiased analysis of your sales methods, organization, policies etc. may be just what you need. So why not try my old friend, Walter Horvath, who has written several books on sales techniques, and who, more than once has proved himself to be a superlative salesman. His life story is like a story out of Arabian nights. I've known the guy for twenty-five years and I recommend him to you. His address is 192 Lexington Avenue, New York City.

### Supply Friends

Many firms do not like their purchasing agents to be too chummy with suppliers and with good reason so they think—because some purchasing agents do have itchy palms. Varied experience and observation convinces me that if a man is essentially crooked, he'll find some way of bilking the company whether he is purchasing agent or not. If a man is not essentially crooked, handling millions of dollars of purchases will not corrupt him in any way. Neither will his judgement of what is best for his company be influenced by friendship for particular suppliers. I would be a fool to say that friendship does not somewhat prejudice purchasing agents. Of course it does. Hence a new supplier always has a hell of a time getting his foot in a new door. But in the long run friendship pays off. During the war I was witness to many cases where buyers with friends were able to get supplies, while those without friends among the suppliers could go to hell.

It is the buyer's job to make sure he is getting the best quality, service and price from his friends among the suppliers. If he is, he should be loyal to his friends and not be ready to switch his business every time some little chiseler comes along with nothing to offer excepting a price cut. On the other hand suppliers ought not to rely too much upon friendship in trying to keep their prices up as they do sometimes. I know of one case where a paper box manufacturer obtained twenty-five per cent above market for his product simply because he knew his friend in a particular company wouldn't check him. When finally that friend woke up the supplier lost a friend and also lost a whale of a big account which he had had for more than twenty years. Suppliers often are too short sighted in not passing along price cuts as fast as they can; that's the best way to emasculate competition. On the other hand no supplier resents being checked up, and purchasing agents should check the prices even of their best friends among the suppliers, just to keep them from being forgetful.

### Territorial Costs

It is quite surprising that in an industry where distribution costs are so high, comparatively few manufacturers know anything about territorial costs. Being a national distributor simply means that goods are sold everywhere in good markets and bad as well with the good markets carrying the bad ones. The first requisite of a good market is, of course, people, but you'd never guess that from the way some manufacturers set up their territories. While it may be a matter of pride to be able to say your products are sold in every state in the Union, does it pay? Since sales are invariably broken down by territories it is easy enough to allocate to specific territories all the costs of doing business in each: salesmen's salaries and traveling expenses, freight etc. When you do this you may find yourself covering a lot of territory that really doesn't yield any profit.

### Old Men

Whenever I think of old men, especially when I hear someone insisting that industry must unload its old men forthwith, I think of Charlie Harmeier, Vice-President of P. Duff & Sons Inc., who to me typifies the scientific fact that biologic age and chronologic age are not synonymous. When I was called upon to reorganize the Duff Company before its acquisition by American Home Products, I found that Charlie Harmeier had then been with the company for 51 years, literally he was "the works." He was treasurer, office manager, plant manager and purchasing agent. He had grown with the company and had taken on one job after the other until he had them all. Since the company had grown into a multimillion dollar outfit such a state of affairs was an anachronism so I had to recommend a reorganization plan that divested Charlie of all his duties save those of finance and purchasing, which always seemed to me to belong together anyway. I won't say Charlie acquiesced quietly. He hollered like hell. It was to be expected. No one likes his power restricted. But Charlie didn't keep on howling. He saw my recommendation was for the good of the company; he took the radical changes I proposed as a young man would—in his stride. During the war I was amazed with Charlie's capacity for work. He got things done in his sphere with dispatch and his ability to procure materials was amazing. While the

# Cut Costs of Packaging

## POWDERED and GRANULAR MATERIALS

### With a Fully Automatic Model JN Packer, Filler, Packer-Weigher

**Used as a Volume Packer, or Volume Filler, or Packer-Weigher, the fully automatic, four station Model JN fulfills every advanced requirement in the handling of a variety of packaging problems — will operate on most types of dry powdered or granular materials, using round, square, rectangular or irregular containers with equal facility.**

**Entering the machine in single line, containers are automatically separated into two lines progressively and, after being filled, are re-grouped into a single line for hand or automatic closure.**

**The Model JN may be equipped to fill at all four stations if reasonable weight variations are permissible; otherwise, containers are bulk filled at first two stations and accurately weighed at the last two stations.**

**Once it is put into operation, the fully automatic features of a Model JN Filling Machine plus its speed, accuracy and clean operation quickly return the machine's purchase price through savings in labor costs alone.**

**It will pay you to get full details concerning how the fully automatic Model JN can cut your packaging costs. Write today.**

### *Clean, Fast, Accurate*

**The dust collector hoods and drip-free shut-off gates at the filling stations of the Model JN insure clean operation. Its fully automatic features provide filling speeds up to 120 containers per minute. And it is built for accuracy — maintains the closest possible commercial tolerances — can be quickly adjusted by the simple turn of a knob to control weight variations due to change in product density.**

**US** NET & GROSS WEIGHING ★ PACKAGE FORMING & FILLING ★ CARTON SEALING, LINING, WRAPPING ★ BOX MAKING

**AUTOMATIC BOX MACHINERY CO., INC.**

Owning and Operating NATIONAL PACKAGING MACHINERY CO. ★ CARTONING MACHINERY CORP.

**45 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.**

*Branch Offices: New York ★ Cleveland ★ Chicago ★ San Francisco (Mailler Searles, Inc.)*

reorganization was going on Charlie and I worked together very well. Sure, we disagreed and we battled occasionally but there was never any rancor or bitterness in our battles. When American Home took over I was afraid for a time that, with their reputation for depending upon young men, AHP might force Charlie to retire. But they didn't and Charlie is still handling his old job, which means he's now been with Duff's fifty-eight years. He'll probably round out a full century. I have met several young old men in my time but Charlie tops them all.

### Universal Sheet Metal Corporation

Whenever you wish any dryers, duct work fans or other sheet metal work built to specification I would heartily recommend Universal Sheet Metal Corporation, 4010 Park Avenue, New York City. From personal experience I can attest that this company does very fine work in any kind of metal and is one of the most honorable firms with which I ever had occasion to deal.

### Special Machines

Very frequently it happens that you must build a special machine and good special machine builders are very hard to come by. I can recommend from personal experience Mantle Engineering Co., Park Avenue & 129th Street, New York City as being a very capable outfit. I've had them build a couple of jobs that turned out very well all around. Sometimes Mantle will quote a top price and when they do they will stick to it even though they lose money by so doing. It is nice to do business with a firm which sticks to its word without chiseling.

*The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.*

### Selective Absorption Heating

A new unit for drying heat sensitive materials, even while frozen, using a radiant heat source better than infra-red lamps or high frequency dielectric equipment, has recently been announced by Procter & Schwartz, Inc., Philadelphia manufacturers of industrial drying equipment.

The process was developed for commercial use by the Dry-Freeze Corporation and Proctor & Schwartz, Inc. are manufacturers of the equipment.

The new unit is especially well suited to the drying of certain types of pharmaceuticals, foods, biologicals, medical and surgical supplies such as sutures, blood and chemicals where heat sensitivity is an important factor. The process dries the materials while frozen, leaving them unchanged chemically.

This patented method uses infra-red radiation in certain very effective wave lengths in the "fundamental vibration region" where radiant energy is absorbed selectively by different materials, depending on the chemical composition of the material. This makes it possible to select radiation in the region where the greatest percentage of the total energy will be absorbed by the water in the product to be dried. This is an ideal method for driving off the water and thus drying materials which are damaged by temperatures above 100 degrees F.

Material may be in glass containers or on trays. Special trays are used with bottoms transparent to this radiation, which is applied only through the bottom of the tray.

While large installations are likely to be tailor-made for individual product requirements, a compact, general purpose self contained unit is available for laboratory or small-scale production use.

Additional information may be obtained from Proctor & Schwartz, Inc., Philadelphia 20, Pa.

### Heavy Piping Frames

A relatively new system of framing, recently adapted to the task of supporting heavy piping runs, has been erected in a large tunnel installation at G. D. Searle & Co., Skokie, Illinois, manufacturers of ethical pharmaceuticals.

Made from basic Unistrut steel channel and fittings, the stanchions were assembled on the job to Unistrut continuous concrete inserts embedded in the ceiling and walls and bolted to the floors. Pipe was then installed on Unistrut roller pipe supports fitted to the horizontal framing members

The Unistrut system used in this tunnel installation is said to have a number of distinct advantages over ordinary methods of piping support. The structure is completely flexible, in that variations in pitch or slope are permitted by the mere loosening of the bolts which tightly clamp together the framing members involved. Thus, if changes or additions are desired, these adjustments may be made quickly and easily without the use of special tools.

Another cost-saving feature is the reduction of detailing time generally required when a project of this kind is in the engineering phase, and the elimination of any need for drilling or welding.

### Barrel Truck

Modern Equipment Co., 2007 Cuming Street, Omaha 2, Nebraska offers a handy little barrel truck which is very light and enables operators quickly to grab and carry barrels and drums.

### Whirlwind Screw Capper

Manufactured since 1934, temporarily discontinued for a short while during the war, the portable Whirlwind Screw Capper, Model "A", suspension spring type, is now again in full production.

This small, compact, powerful unit will handle screw caps of every type, molded or metallic, on any type or shape of container, glass or tin. It is equipped with a

The MIKRO hand of ECONOMY

# $60. per day more material recovered per machine

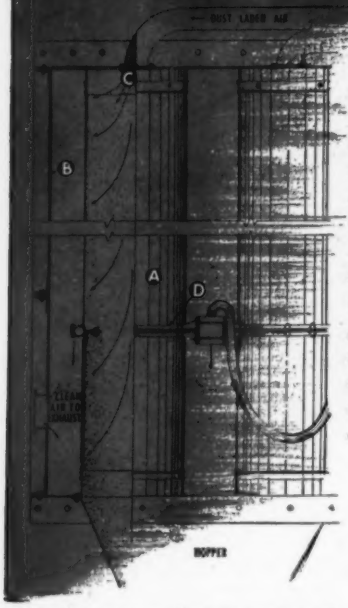



*Diagram showing operation of the MIKRO-COLLECTOR —Felt bag (A) is clamped in housing (B). Dust-laden air enters from top (C). As the air passes thru filter medium, dust deposited on inner surface of bag is dislodged by dual-action of cleaning ring (D). Cleaning is accomplished by counter-current of pressured air from ring and flexing of bag by ring as it moves up and down continuously.*

**SEND FOR—** your copy of new MIKRO-COLLECTOR bulletin.

One large manufacturer processing a valuable material, recently found that each MIKRO-COLLECTOR* installed in his plant saved him an additional $60 per day in salvaged material.

These and similar dust-saving, profit-making performances are being rolled up on all sides. They are directly attributed to these advantages which the MIKRO-COLLECTOR brings—

- ★ High percentage of recovery—99.9% plus.
- ★ Greatly reduced filter cloth area means low maintenance costs, quick and easy material changeovers.
- ★ Constant uniform flow of dust-laden air.
- ★ Filter rate from 15 to 25 cfm. per sq. ft. of fabric.
- ★ Cleaning ring eliminates mechanical shaking of bag.

The revolutionary principles employed in MIKRO-COLLECTOR design insure optimum recovery and sensational filter rates. Our research laboratory and test facilities are available for your dust collection problem without charge or obligation.

*Patents applied for by H. J. Hersey, Jr., and Pulverizing Machinery Company.

**PULVERIZING MACHINERY COMPANY**
**22 Chatham Road Summit, New Jersey**

**MIKRO-COLLECTOR**
Reg. U. S. Pat. Off.
By the makers of
MIKRO-PULVERIZERS and MIKRO-ATOMIZERS

PRESERVE OUR HERITAGE: FAITH, FREEDOM AND INCENTIVE



# FOR CLEANING CONTAINERS
*By Compressed Air*

## *The* SANITAIR
AUTOMATIC AIR BOTTLE CLEANER

Air-cleans up to 130 containers per minute. May be synchronized into any production line.
Two complete revolutions of every container for each revolution of the machine provide double cleaning time at normal operating speeds . . . in half the usually needed working space.
Vertical upside-down position of the container at the point of cleaning not only produces the most thorough cleaning action but also insures the most economical use of compressed air. Foreign matter is collected in removable bag.
The Sanitair will clean all size containers from AGST bottles to wide mouth containers . . . requiring only a ten minute adjustment for change from one container size to another. Our "Sanitair Bulletin" describes all details; write for it today.

## *The* E-Z
TWO-TUBE CLEANER
*Semi-Automatic*

A bottle cleaner for new glass. As a two-tube machine it handles two containers at a time. The instant the inverted container contacts the machine, a blast of compressed air efficiently removes foreign matter from the container. Requires only ordinary skill for efficient operation. Furnished with air filter for connection to customer's air lines. Floor space required only 27 x 14 inches Write for Model E-Z Bulletin.

**U. S. BOTTLERS' MACHINERY CO.**
**4013 N. Rockwell St. Chicago 18, Ill.**

OFFICES: Boston—Dallas—Houston—Denver—Los Angeles—New York—Phoenix—Portland—San Francisco—Seattle—Tampa—Montreal—Toronto—Vancouver—Winnipeg—New Orleans—Philadelphia
EXPORT OFFICE: Toledo, Ohio

built-in specially designed Universal Current Motor operating from the standard electric light socket.

The unique suspension spring mounting permits operation with ease over a wide area, eliminating extra steps and motions and thus speeding up production. Normal output is about 30 to 50 capped containers per minute.

To operate, it is suspended from the ceiling directly above the containers to be capped, positioned about a half inch above them. The caps are dropped on the containers by hand. The Whirlwind Screw Capper is then used to tighten the caps to any required degree. There is a readily accessible tension adjustment device which can be set in advance for any desired degree of cap tightness according to the needs of the individual user.

All caps are tightened uniformly and securely with practically no effort on the part of the operator. In fact, its use insures an air-tight, leak-proof uniform seal at all times without dependence on the individual operator.

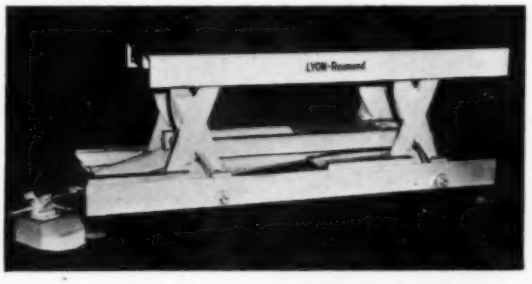
Further, because of the suspension spring design the Whirlwind is easy to use for the capping of small, tightly packed vials and odd shaped containers. Manufactured by Scientific Filter Co., 14 Franklin Square, N. Y. 7.

### Elevating Table

An exceptionally low height and a greater range of elevation is made possible with the compound lever arrangement in a hydraulic feeding table offered by Lyon-Raymond Corporation.

A standard Model No. 1196 is available with a capacity of 10,000 lbs. The range of elevation is from 12 inches to 36 inches thus providing a total life of 24 inches.

The platform is 36 inches wide by 96 inches long.




End and side extensions are available to increase the platform area.

The new table also features a vertical lifting arrangement and the manufacturer stresses the point that there are no uprights extending above the platform to stand in the way of overhanging material.

While offered with a two speed foot pump, a power operated pump with either push button or foot switch control is recommended for faster elevation.

The table can be furnished with wheels and casters to make a portable unit with a lowered height of 20 inches.

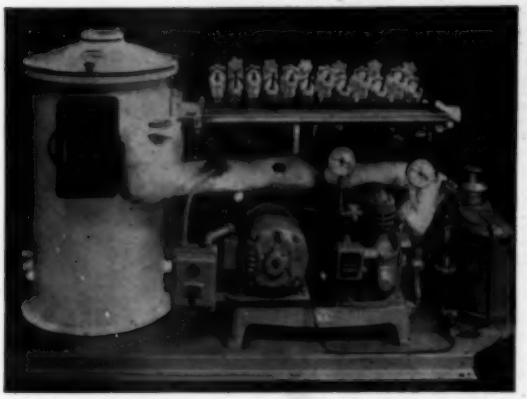
Write to Lyon-Raymond Corporation, 14167 Madison Street, Greene, N. Y. for literature on this and other standard models.

### Freeze-Drying Unit

The F. J. Stokes Machine Company, Philadelphia, Pa., announce a new Freeze-Drying unit, Model 103-FPM.

A completely packaged unit, it consists of a manifold having 24-valve ports, a Freon refrigerated condenser, a high vacuum McLeod gage, and a high vacuum Stokes "Microvac" pump with oil clarifier.

The Stokes Freeze-Drying unit has a batch capacity



of 3500 ml. and a capacity of 7500 ml. before defrosting is necessary.

Self-contained and mounted on a flanged floor pedestal, the Stokes Model 103-FPM Freeze-Drying unit is 40 inches high, and requires a floor space of 38 inches by 72 inches.

Complete details will be sent on request by writing the F. J. Stokes Machine Company, 5900 Tabor Road, Philadelphia, 20 Pa.

### Stokes Folder

The F. J. Stokes Machine Company announces a new 4-page folder titled "Stokes High Vacuum Processing Equipment."

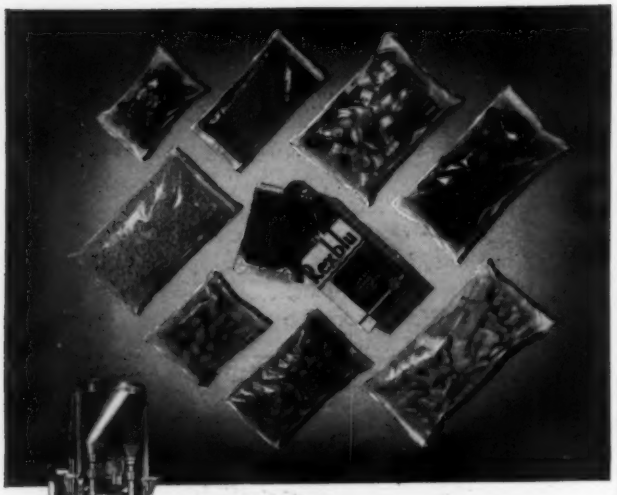
The folder is a condensed summary of Stokes high vacuum processing equipment, describing briefly such units as Stokes vacuum Rotary Dryers, Shelf Dryers, Freeze-Drying units, Impregnators, Extraction and Solvent Recovery apparatus, Vaccum Stills, and complete Vacuum Metallizing or Evaporation units.

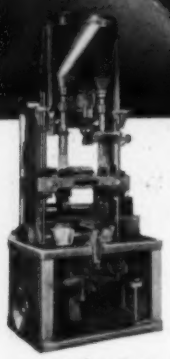
Bulletin No. 705 will be sent on request by writing the F. J. Stokes Machine Company, 5900 Tabor Road, Philadelphia 20, Pa.

### New Labeler

Dumatic Industries, 12th & Jefferson, Philadelphia has just completed designing and building a new Wrap-Around Labeling machine to be known as Dumatic's "Noglu". The machine operates with thermoplastic or heat seal paper.

The machine is a compact unit of the same basic design as the Dumatic glue machine. A new simplified method includes the use of a specially designed picker plate assuring perfect registry. This plate is equipped





# POLYETHYLENE PACKAGES ON STOKESWRAP PACKAGING MACHINES

Some of the products particularly suited for packaging in Polyethylene film are the following:

- Soap powders
- Bleach and chemical powders
- Liquids
- Syrups
- Creams and pastes
- Small metal parts
- Air rifle shot
- Ball bearings and hardware
- Marbles
- Frozen foods
- Nuts and hard candies
- Dehydrated products
- Hygroscopic products
- Powdered milk products

The Stokeswrap Automatic Packaging Machine has been produced for a number of years for handling various heat sealing films, such as Cellophane, Pliofilm, heat sealing foil, heat sealing papers, etc., and the new machines are now equipped to handle Polyethylene film, either printed or unprinted. Use of Polyethylene films gives a stronger package, allowing heavier weights of products to be handled and also giving added protection for many products which heretofore could not be packaged in flexible packages.

**STOKES & SMITH Co**

**PACKAGING MACHINERY** — **PAPER BOX MACHINERY**

*Subsidiary of Food and Chemical Corporation*

**4912 Summerdale Ave., Philadelphia 24, U. S. A.**

fmc

Exclusive West Coast Distributor
**Anderson-Barngrover Division of FMC**
**San Jose 5, California**

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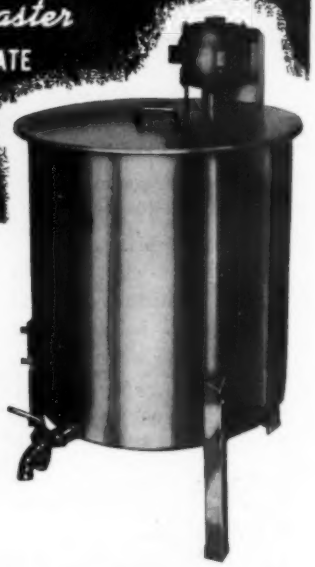
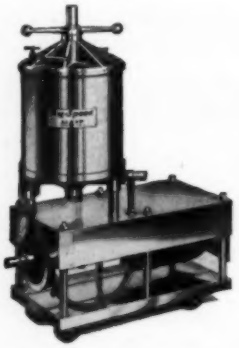
# Save Time and Labor with this Complete Mixing Unit

*It's Easier-Faster* TO LOAD AND OPERATE



**For High-Quality Low-Cost Processing**

Alsop Mixing Tanks make your mixing and blending operations extra easy, fast, efficient. The all-welded stainless steel construction, rounded corners, and the highly polished, crevice-free surfaces mean less time and labor in cleaning. The shorter legs makes the whole Tank lower, easier-to-load and operate. For easier, faster mixing—for efficient, economical operation, specify Alsop Mixing and Storage Tanks—sizes from 5 to 300 gallons capacity.



**Low-Cost Filtration**

This Alsop "Sealed-Disc" Filter assures uniform, positive filtration at lowest cost. Its simplicity, portability and compactness means convenience and speed in operation. Made in Stainless Steel, Brass and Bronze, etc., in a wide range of sizes and capacities.

Our new catalogue completely describes our Mixing and Storage Tanks, Filters, and Portable Mixers. Write to Alsop Engineering Corporation, 506 Cass Street, Milldale, Conn.

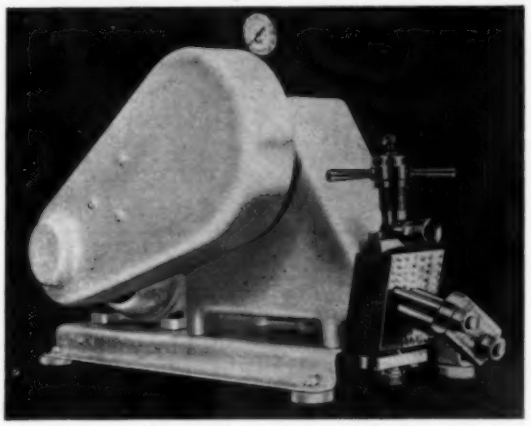
**ALSOP ENGINEERING CORP.**
Filters, Filter Discs, Mixers, Agitators, Pumps and Tanks

for vacuum to pick the labels and it also incorporates heat for activating the paper, the heat is controlled so that the label is ready for application as soon as it travels from the label box to the top of the container. The label is held on the container by means of a grip finger. Push down rods send the label down and a single wiping arm taking a right then left motion complete the application.

Use of the "Noglu" type labeling machine will enable manufacturers to get a more uniform quality of appearance, a lasting bond for greater shelf life, increase production and save time of glue preparation and cleanup. Up to 50 containers per minute can be labeled depending on the operator. Such items as glass bottles, collapsible tubes, fuses, plastics, vials, etc. can be labeled.

### Hydropulse Homogenizer

C. W. Logeman Co., 633 Bergen Street, Brooklyn 17, New York offers a very compactly designed homogenizer rated at 50 gph with a motor of only one and one-half



horse power. This high capacity and low power consumption is due to the pulsation principle under which the machine operates. It is very simply designed and produces emulsions of exceptional uniformity.

### Perforates Bags, Cartons or Wrappers

The newly announced American Model 700 Photo-electric Code-dating Perforator is the answer to high speed coding, particularly in connection with heat sealed wax-type, cellophane or pliofilm bags. No operators are needed. Attachments are unnecessary. The perforator unit is self powered and as soon as the electric plug is attached, the perforator is ready for use.

In the accompanying photograph, the American Model 700 is shown in position directly over the conveyor line in the main plant of a large Potato Chip Company at Madison, Wisconsin. It will be noticed that after the potato chip bags pass through the heat sealing unit, they continue on without handling or interruption past the Code-dating Perforator. As the bags intercept the electric eye beam, they are instantly perforated with several numbers *through the sealed portion of the bag.* As the picture was taken, the potato chip bags were going through the perforator at the rate of ninety-five per minute. Depending on the size of the item, the Perforator can code up to 200 per minute.

Not only is the date, batch number, plant identification or other information perforated as desired, but a single round hole can at the same time be placed in the center of the bags to be used in hanging them on display racks. Also, each item passing through the perforator is automatically registered on an Electric Counter clearly

visible through the front of the cover. This provides a valuable production check which has heretofore not been available.

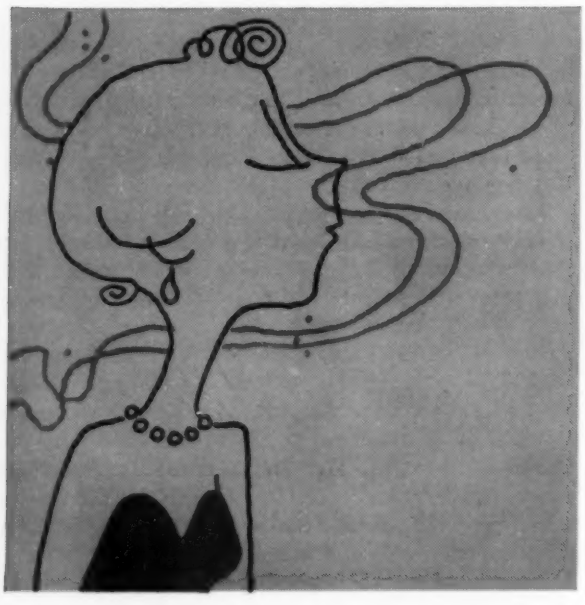
Being mounted on a pedestal type stand, the complete unit can be moved, raised, lowered or tilted to meet varying conditions. Since there are no cams or power arms to connect, the perforator can be moved from one line to another in a moment's time without disrupting production. Because of the ultra-high speed clutching mechanism, many manufacturers will want to converge two or more conveyor lines to a central point, with one photo-electric perforator taking care of the coding at a rapid pace just before the packages are removed from the conveyor for packing.

The American Perforator Company of Chicago, originators of portable electric perforators, have for many years supplied the packaging industry with actual perforator attachments which are operated by power arms directly connected to packing or wrapping machines. Nationally known packagers of cereals, crackers, cookies, butter, margarine, asperin and similar products, have long been code-dating their products with American perforator attachments. However, these have required synchronized attaching methods, whereas the Model 700 timing is controlled entirely by the photo-electric eye. The cutting dies are hardened and in addition, are removable and interchangeable.

In cases where it is impossible to use a photo-electric or attachment type perforator, the dating can be done by means of a hand, foot or electrically operated perforator before the packaging process. The average perforator will penetrate fifteen to twenty sheets of paper in a single bite. Even an inexperienced operator can perforate ten to twenty thousands labels or wrappers per hour, and the small labor costs involved to perform the coding is saved many times over through having better merchandise control as a result of dated items. The American Perforator Company, 625 W. Jackson Blvd., Chicago 6, Illinois.

Use good scents to

make smart products ...use A Norda Original



Smart products pay . . . smart products sell. Plan a smart, new line, distinguished by *your own* memorable, modern fragrance.

Choose *your* NORDA ORIGINAL and make your whole line unique. A NORDA ORIGINAL odor has that lingering, spicy-fresh bouquet women like because it's so different. Plan new best-selling colognes, toilet waters, creams, lotions, lipsticks, perfumes, deodorants, and soaps. A NORDA ORIGINAL will help you make them most popular.

Ask Norda—*first to talk sales scents*—for your free samples. Test the smell that will sell your *new* products. Send to Norda now—today.

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# PATENT THOUGHTS AND TRENDS

*by Thomas Cifelli, Jr., Patent Attorney**

*Introduction*

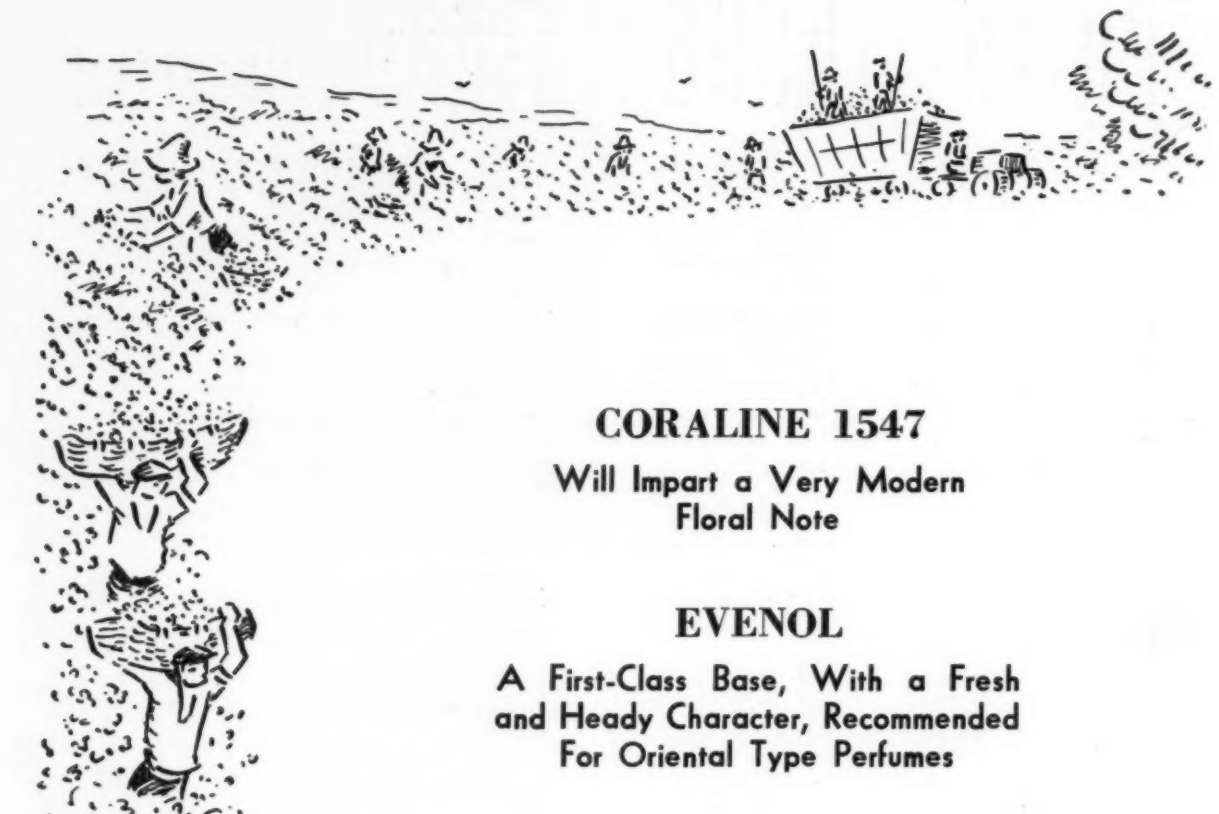
The present issue begins a review of U. S. Patents dealing with dentifrices. As was pointed out in previous reviews, the present one should not be considered an exhaustive one, although all of the patents classified by the U. S. Patent Office in class 167, sub-class 93, will be noted. The patents are divided into two groups, the first group being patents which have expired, that is to say patents which are more than 17 years old. The second group covers those patents which have not run their full course of 17 years.

Because of the large number of patents involved, the expired patents are merely listed below.

## *A. EXPIRED U. S. PATENTS*

| *Patent No.* | *Patent Issue Date* | *Inventor* | *Title* |
|---|---|---|---|
| 30,834 | Dec. 4, 1860 | John G. Popp | Improvement in Medicated Lotions. |
| 50,110 | Sept. 26, 1865 | Eliza J. Field | Improved Composition for Cleansing the Teeth. |
| 61,320 | Jan. 22, 1867 | John G. Cook | Improved Dentifrice. |
| 85,166 | Dec. 22, 1868 | G. F. J. Colburn | Improved Dentifrice Paste. |
| 94,840 | Sept. 14, 1869 | Pierre Riuypeyrou | Improved Tooth-Wash. |
| 108,845 | Nov. 1, 1870 | William M. Tandy | Improvement in Compounds for Cleansing and Preserving the Teeth and Gums. |
| 111,821 | Feb. 14, 1871 | Oliver Danforth | Improvement in Dentifrices. |
| 127,408 | June 4, 1872 | William H. Farnham | Improvement in Tooth Powders or Dentifrices. |
| 152,098 | June 16, 1874 | Thomas D. Forster | Improvement in Tooth Pastes. |
| 164,433 | June 15, 1875 | Albert C. Dung | Improvement in Compositions for Dentifrice. |
| 196,275 | Oct. 16, 1877 | Edward G. Ward | Improvement in Dentifrices. |
| 249,462 | Nov. 15, 1881 | William Doepp | Tooth Powder. |
| 284,751 | Sept. 11, 1883 | Alfred P. Merrill and John Eastwood | Dentifrice. |
| 315,750 | April 14, 1885 | Joseph E. Edmundson | Dentifrice. |
| 380,700 | April 10, 1888 | Jacob Schwartz | Dentifrice. |
| 396,192 | Jan. 15, 1889 | Charles B. Clark | Composition for Cleaning the Teeth. |
| 693,149 | Feb. 11, 1902 | Mordecai H. Fletcher | Dentifrice. |
| 760,397 | May 17, 1904 | Edward C. Kirk | Dentifrice. |
| 802,099 | Oct. 17, 1905 | Eustace H. Gane | Dentifrice. |
| 808,105 | Dec. 26, 1905 | George W. Morse | Dentifrice. |
| 834,676 | Oct. 30, 1906 | Herman C. Luyties | Dentifrice. |
| 840,738 | Jan. 8, 1907 | Frank P. Barnard | Dentifrice. |
| 913,426 | Feb. 23, 1909 | Wilhelm Osborne and Heinrich Schupp | Process of Converting Catechun Into a Catechu-Tannic Acid. |
| 926,280 | June 29, 1909 | Winfield Scott | Process of Preparing Concentrated Hydrated Magnesia. |
| 947,120 | Jan. 18, 1910 | Winfield Scott Morrison | Dentifrice |
| 975,405 | Nov. 15, 1910 | Lucien Eilertsen | Antiseptic and Perfumed Block. |
| 975,814 | Nov. 15, 1910 | Albert Westlake | Mouth-Tablet |
| 1,073,725 | Sept. 23, 1913 | Rose Yeganian | Tooth Powder. |
| 1,082,681 | Dec. 30, 1913 | William E. Danner | Tooth Powder. |
| 1,107,389 | Aug. 18, 1914 | Lee O. Waller | Dentifrice. |
| 1,112,180 | Sept. 29, 1914 | Charles W. Westenfelter | Dentifrice. |
| 1,133,250 | March 23, 1915 | William M. Ruthrauff | Dentifrice. |
| 1,169,998 | Feb. 1, 1916 | Francis J. Rhodes | Dentifrice. |
| 1,171,392 | Feb. 8, 1916 | Adolphus G. Meier | Chewing-Gum and Method of Making the Same. |
| 1,211,712 | Jan. 9, 1917 | James E. Keefe | Dentifrice. |
| 1,222,144 | April 10, 1917 | William M. Ruthrauff | Dentifrice. |
| 1,225,362 | May 8, 1917 | William M. Ruthrauff | Dentifrice. |

*Gaylor, Cifelli & Jurick, Newark, N. J.



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GRASSE (A. M.) FRANCE ARGENTEUIL (S. & O.) FRANCE

| *Patent No.* | *Patent Issue Date* | *Inventor* | *Title* |
|---|---|---|---|
| 1,262,888 | April 16, 1918 | Albert Westlake | Mouth-Tablet. |
| 1,275,275 | Aug. 13, 1918 | Samuel Levinson | Mouth Toilet Preparation. |
| 1,275,779 | Aug. 13, 1918 | William F. Spies | Dentifrice and Method of Making the Same. |
| 1,297,494 | Mar. 18, 1919 | Meyer L. Rhein | Dentifrice. |
| 1,297,494 (Reissue 14,961) | Oct. 19, 1920 | Meyer L. Rhein | Dentifrice |
| 1,345,819 | July 6, 1920 | Allan Scott Wolfe | Composition for Cleansing Artificial Dentures and the Like. |
| 1,377,780 | May 10, 1921 | Andrew T. Lane | Composition of Matter. |
| 1,379,046 | May 24, 1921 | William S. Rogers | Dentifrice. |
| 1,379,744 | May 31, 1921 | William Congreve | Preparation for the Teeth. |
| 1,386,252 | Aug. 2, 1921 | William T. Green | Dentifrice. |
| 1,386,627 | Aug. 9, 1921 | Frank Y. Keator | Confection for Use As a Chewing-Gum. |
| 1,396,641 | Nov. 8, 1921 | Guy King | Medicated Chewing-Gum. |
| 1,411,681 | April 4, 1922 | Gilderoy O. Burlew | Dentifricial Tablet. |
| 1,416,666 | May 16, 1922 | Emanuel London | Mouth Wash. |
| 1,433,979 | Oct. 31, 1922 | Charles W. Archer | Preparation for the Treatment of Pyorrhea. |
| 1,435,498 | Nov. 14, 1922 | Ernest D. Resnik | Dentifrice. |
| 1,445,351 (Reissued 15,691) | Feb. 13, 1923 Sept. 25, 1923 | Carl Pfanstiehl | Tooth-Cleaning preparation. |
| 1,445,352 | Feb. 13, 1923 | Carl Pfanstiehl | Tooth-Cleaning Preparation. |
| 1,460,179 | June 26, 1923 | William M. Ruthrauff | Dentifrice. |
| 1,466,578 | Aug. 28, 1923 | Isabel Clifton | Pyorrhea Remedy. |
| 1,467,024 | Sept. 4, 1923 | Einar Bergve | Tooth Paste. |
| 1,467,455 | Sept. 11, 1923 | Oscar F. Schmid | Dentifrice. |
| 1,470,794 | Oct. 16, 1923 | Viggo Valdemar and Julius Andresen | Dentifrice |
| 1,471,987 | Oct. 23, 1923 | Clarence C. Vogt | Mucin-Dissolving Agent. |
| 1,477,177 | Dec. 11, 1923 | Rudolph A. Kuever | Dentifrice. |
| 1,482,741 | Feb. 5, 1924 | Paul M. Giesy | Dentifrice Material. |
| 1,484,415 | Feb. 19, 1924 | John P. Shepherd | Tooth Paste. |
| 1,488,097 | Mar. 25, 1924 | Henry N. Creger | Dentifrice. |
| 1,488,315 | Mar. 25, 1924 | Everett B. Castleman | Cleanser for Artificial Teeth. |
| 1,491,408 | Apr. 22, 1924 | Rudolph A. Kuever | Dentifrice. |
| 1,492,299 | Apr. 29, 1924 | Karl J. Kyle, John A. Binford and John T. Waddell | Tooth-Paste Composition. |
| 1,492,715 | May 6, 1924 | Rudolph A. Kuever | Dentifrice. |
| 1,516,206 | Nov. 18, 1924 | Carl Pfanstiehl | Tooth-Cleaning Preparation. |
| 1,516,398 | Nov. 18, 1924 | Charles McDowell | Gum Dentifrice. |
| 1,522,410 | Jan. 6, 1925 | Maurice M. Bluhm | Dentifrice. |
| 1,522,610 (Reissue 16,593) | Jan. 13, 1925 April 19, 1927 | Johannes Freng and Einar Bergve | Method For Producing a Disinfecting or Cleansing Spray for Hygienic and Medical Purposes. |
| 1,523,840 | Jan. 20, 1925 | Moritz Schlesinger | Tooth Paste. |
| 1,526,940 | Feb. 17, 1925 | Eugene Staegemann | Tooth-Paste Composition. |
| 1,527,523 | Feb. 24, 1925 | Ferdinand W. Nitardy and Lloyd K. Riggs | Cleansing and Polishing Material. |
| 1,528,422 | Mar. 3, 1925 | Gordon F. Helsley | Dentifrice. |
| 1,529,486 | Mar. 10, 1925 | Gerhard Kaemmerling and Louis Y. Wood | Tooth Paste. |
| 1,536,305 | May 5, 1925 | Ferdinand W. Nitardy | Dentifrice Material. |
| 1,551,638 | Sept. 1, 1925 | Peter H. Brady | Dental Cream or Paste. |
| 1,558,160 | Oct. 20, 1925 | Clyde M. Gearhart | Gum Massage Preparation. |
| 1,559,722 | Nov. 3, 1925 | Leo Mandelstamm | Dentifrice. |
| 1,566,218 | Dec. 15, 1925 | John T. Leland | Dentifrice. |
| 1,567,974 | Dec. 29, 1925 | Charles W. Monroe | Treatment of Pyorrhea. |
| 1,591,727 | July 6, 1926 | Ferdinand W. Nitardy | Dentifrice. |
| 1,592,013 | July 13, 1926 | Norman W. Taylor | Abrasive Denture Gum. |
| 1,607,696 | Nov. 23, 1926 | Curt Schroeder and Alfred Keil | Tooth Paste and Process of Making Same. |
| 1,609,591 | Dec. 7, 1926 | James F. White | Composition of Matter. |
| 1,611,487 | Dec. 21, 1926 | Earl B. Putt | Medicament. |
| 1,619,076 | Mar. 1, 1927 | Rudolph A. Kuever | Cleansing and Polishing Agent. |
| 1,622,391 | Mar. 29, 1927 | Ferdinand W. Nitardy et al | Dentifrice. |

(*Continued on page 760*)

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# YOUR TRADE-MARK RECORD

*by John H. Graham*
*International Patent and Trade-Mark Consultant*

### The Future of Trade-Marks!

The question of how to proceed in starting to register a trade-mark is always important. There are several steps. You think up a good mark. By all tests it is not descriptive, not misdescriptive, not geographic, etc. In other words it looks good. You like it. Now what do you do.

Unlike a patent, you must use a trade-mark before you can do a thing.

With an invention you can use it or not before patenting as long as you file an application before a year has past from the first use in commerce.

With a trade-mark you have to use it in interstate or foreign commerce first. When the first commercial sale is made, you have a date of first use. This has to be advised to the Patent Office when you file your application for registration.

However, before anything as drastic as applying for registration is done, a search should be carried out. This will find and bring to the fore any other marks which are registered and which might be in your way. Searches are done by experts in that service. They dig up in the class or classes you are interested in, all possible conflicting marks they can find. This is very important.

The trade-mark division of the Patent Office is getting increasingly unwilling to grant marks where any doubt exists.

Some years ago, when doubt existed, the Office was rather inclined to issue the mark and let the courts decide whether or not there was an issue involved. Not so now!

The Office has taken unto itself the whole decision. Some of the Office rejections are fair, most are not. An individual, namely an examiner, decides whether or not the mark is too close to others to be registrable. From then on you can appeal if you don't approve the decision.

Witness for example some of the recent Patent Office decisions.

"Autowrap" for paper bags and merchandise envelopes was held to be unregistrable in view of the existence of registered trade-marks "Autopack" "Autoroll," "Autofold", "Autotab," "Autosnap," and "Autoset" all generally for paper goods.

Also, the mark "White Ox" was held unregistrable for work gloves because there was a "White Mule" for identical goods.

Furthermore, the mark "Maycourt" was held unregistrable in view of "Maycrest" and Maycraft" for dress and negligee shirts.

Decisions of this nature rather upset one's plans. If one can establish "White" or "Green" with some other wording for a trade-mark and thereafter prevent anyone from using these colors in other combinations as trade-marks, soon there will not be enough words to go 'round.

In a case like the above mentioned "Autowrap" matter, many experts have agreed with my view, that the existence of several similar marks each using "Auto" as a first part means that one more can hardly add to the confusion.

When you have "Dairy maid," "Silly maid," "Happy maid," etc., adding "Model maid" to the list cannot hurt anyone. The goods may be similar, but no more confusion can arise, particularly since the second part, namely "Maid" has a positive meaning capable of modification by the adjective.

The future of trade-marks lies in someone accepting this theory. If anyone can, by a single registration, corner for his particular field, a word which can be used in hundreds of phrases and combinations, then the future of trade-mark registrations looks black.

If "Kiss" for cosmetics or perfumes can be registered and prevent "Kiss and tell," "love and kisses," "a kiss to you" and so on, something is wrong. Our language is not that replete with descriptive terms.

It is up to the Patent Office in its trade-mark division to show more leniency in allowing registration when possible conflict arises.

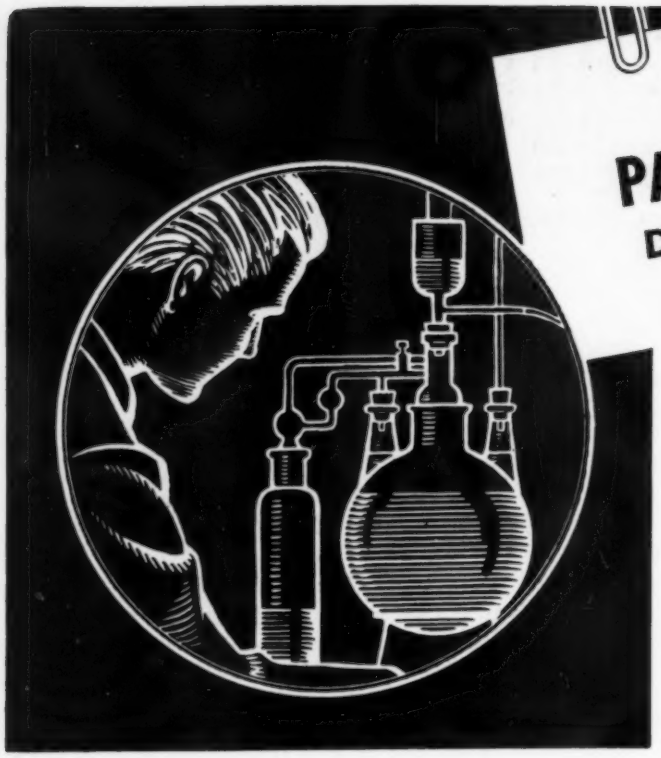
Granted it is the job of the Government to protect the public from confusion and deception in such matters, it is hardly the job of the individual examiner of trade-marks to set himself up as Judge and Jury to this end.

A trade-mark owner works hard for his brain child. He creates it, has it searched, has an application for registration prepared, simultaneously puts real money behind the publicity and advertising campaign to support it. If he is then told eighteen months later by a trade-mark examiner that he cannot have the mark, it leaves him with a defeatist attitude toward registration at the Patent Office.

The best thing that can happen is to see a more liberal attitude on the part of the trade-mark department's personnel.

After all, many marks which are used to hold back a registration have not been used and never will be used.

That however is poor consolation to the trade-mark owner who has put time, money and effort into a good mark only to have it refused by the authorities.



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BOUND BROOK, N. J.

There is no better time to change than now. A little pressure on the trademark division from all sides might help a lot in bettering the rather sad situation which exists today.

AS A TOTAL SIDE ISSUE BUT ONE OF INTEREST. The F.T.C. appealed to the Commissioner of Patents in two cases, one against Elder Mfg. Co. for cancellation of the mark "permashrunk" and the other against Royal Pharmacal Co. for the mark "Manfre."

In both cases it was held by the Commissioner of Patents that the F.T.C. lacked jurisdiction for marks registered under the 1905 Act even though the marks were republished under the 1946 (Lanham Act).

In other words, only marks actually filed and registered after 1946 can be attached by the F.T.C., if this decision is upheld.

## The T.G.A. Meeting

(*Continued from page 655*)

may be only a cosmetic. However, if it accomplishes this objective by its effect on the structure or function of the body or by its effect on a condition of disease it is a drug. Let's illustrate. An article which appears to be a pleasantly perfumed cream-like preparation is labeled 'bust cream.' The directions are to put it on the female bust. That's all we learn from the label. Is it a drug or a cosmetic? That depends on how it is intended to accomplish 'improvement' of the bust. Advertising may readily indicate that it is intended to promote attractiveness by increasing the size of the less opulent bust. Advertising may be vague on this point in the written word but may make it clear by an illustration of Miss America in a bathing suit. The salesperson or demonstrator may clear up the question by a promise to the customer in the retail store that the article will enlarge the breasts. Why is there such concern over whether the article should be classified as a drug or cosmetic?

"Because there is a vast difference in the legal requirements. The Congress intended to impose much more elaborate safeguards for drugs than were imposed on cosmetics. Articles that are intended to control disease and to effect structures and functions of the body have great potentiality for harm as well as good and they must be adequately labeled to insure safe and efficacious use by people of ordinary understanding.

"Another illustration that emphasizes the need for careful consideration by the manufacturer is the "treatments" that are supplied both to the home and to beauty shops. These treatments which are intended to change contours, restore sagging muscles and tissues, eliminate blemishes, and various, and sundry other desirable things are undoubtedly drugs since they are intended to change or affect structures. The customer may be seeking merely to "promote attractiveness" but the mechanics of the treatment as intended by the seller make the article a drug and therefore subject to the drug requirements of the law. Perhaps these are the preparations that have been referred to by some as "active cosmetics." If so, active cosmetics are drugs.

"If a manufacturer or seller by reason of intended use causes an article to be classified as a drug he must assume the obligation of providing labeling which will insure safe and efficacious use. This means that directions for use must be supplied by the label which will clearly set forth the amount to use—the method of administration or application—the duration of treatment and name all of the diseases or conditions for which it is to be used. Warnings against use which might be harmful must also be set forth on the label.

"This is the application of section 502 (f), of the Federal Food, Drug, and Cosmetic Act. The courts have held that adequate directions for use must be supplied for all drug uses intended. This means that any representation of intended drug use in advertising or otherwise must be provided for by directions on the label. Every disease condition or structural or functional condition for which benefit is implied in advertising must be also named on the label as a part of the directions for use. This creates a dilemma. Advertising claims may cause misbranding because they are not repeated on the label and if repeated on the label they may misbrand because they are false or misleading.

"It is clearly the manufacturer's obligation to the public to determine by every means at his disposal that the components of the article he sells are safe for the use that he intends and that the combination of the components which make up the article is adequately tested and will not cause injury when used as directed or when used as may be reasonably customary or usual. Fairly speaking, this responsibility imposes upon somebody an adequate pre-testing of the components of the cosmetic or drug by laboratory means and by clinical or animal testing when necessary. It also imposes the responsibility for testing products and for maintaining adequate batch control over manufacture to insure that the finished product will be safe."

## Explosive Self-Service

(*Continued from page 651*)

and selling and advertising procedures. These divisions may divide products largely into the two classifications as outlined above. They may go even further and sharply define two distinct markets, largely incompatible, for competing brands of the same kind of product, such as hosiery or cosmetic creams.

Self-service selling, if it lives up to its present promise of dynamic expansion, has plenty of explosive possibilities. It may mean that the time for decision is approaching for many retailers and many manufacturers. It may mean two largely incompatible markets which will force many manufacturers to make their choice. It may mean, if the economy in store operations sets an effective new level for retail costs, a revision in much of our legal thinking in government regulations and new aspects for Fair Trade. If it's to be a revolution, it can be a wow.

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# COMPOUNDER'S CORNER

## Chlorophyll as a Body and Breath Deodorant

The latest characteristic attributed to chlorophyll is an ability to act as a body and breath deodorant on oral administration. This is indicated in the report by F. H. Westcott in the *New York State Journal of Medicine* (50:698, 1950). In studies on the effects of the material in patients with hypochromic secondary anemias, it was noticed that the odors of foods and of vitamin $B_1$, usually detectable in urine, were greatly decreased when patients were taking the specially prepared chlorophyllins. Following osmoscopic readings of the effects of the material on highly odoriferous substances, including benzyl mercaptan, tests were made on humans. In the early tests made upon a physician and four nurses it was found that eating a tablet containing the chlorophyllins reduced detectable underarm odors from 56 to 100 per cent in all five subjects within seven hours and were effective as long as 18 hours in doses of 65 to 200 mg.

These results were confirmed by further tests on a group of 12 college girls. When one tablet containing 100 mg. of the extract was taken in the morning before moisture had a chance to dry on the skin surfaces, the perspiration odor was not detectable in over 90 per cent of the cases and barely detectable in one case. Since then, the tablets have been tried on more than 50 individuals who reported benefit in over 90 per cent of cases, on the basis of personal observations with respect to relief of body odor.

To test the efficiency of the specially prepared chlorophyllins on known breath odors, 12 subjects were given varying doses of grated onion or onion juice by mouth. Tests were done at thirty, sixty, and one hundred twenty minutes to observe the speed of deodorization; 65 to 200 mg. of the specially prepared chlorophyllins powder were allowed to dissolve in the mouth, followed by swallowing of the residue. A similar study was made, but a mouth wash of the specially prepared chlorophyllins in solution was used immediately after taking onion juice. Results were more satisfactory and showed an immediate decrease in odor with osmoscopic readings from 256 to 27 after five minutes. This study reveals that the odor of onion remaining after eating solid onion is due to particles remaining in the teeth and crevices of the mouth. Careful rinsing of the mouth with the specially prepared chlorophyllins solution or dissolving a tablet in the mouth will speed the cleansing process and make it more permanent, but it is effective only if the mouth is cleansed. Clinical studies showed that the material effectively neutralizes obnoxious odors in the mouth from foods, beverages, tobacco, and metabolic changes (halitosis).

On the basis of these observations, Westcott states that these chlorophyllins are effective in neutralizing the obnoxious odors from perspiration due to physical exercise, nervousness, and illness; obnoxious foot odors, menstrual odors, and many urine odors from ingested materials.

## Conductive Dental Impression Material

In the *Journal of the American Dental Association* (39:755, 1949) C. B. Frankel responds to many requests by publishing the formula of a conductive impression material, formerly available under the name, "Electro-compound." The procedure calls for the following ingredients, the proportions being in per cent by weight:

| | |
|---|---|
| **Graphite (Acheson 38)** | **54.2** |
| **Electrolytic copper dust** | **1.4** |
| **Paraffin (M.P. 52° C.)** | **24.6** |
| **Paraffin (M.P. 60° C.)** | **15.6** |
| **Candelilla wax** | **2.5** |
| **Ozokerite** | **1.6** |
| **Powdered rosin (trace)** | **0.1** |

Thoroughly melt paraffins, candelilla wax, ozokerite and powdered rosin in a double boiler. Then slowly add graphite and copper dust, constantly stirring until all is incorporated and a homogeneous thick paste is obtained. Spread paste on a large glass slab, cover with another slab and compress until the mass is ¼ inch thick. Chill slightly and cut into strips ¼ inch wide with a hot knife. If preferred, "Aquadag" (a colloidal suspension of graphite in water) may be used as a surface coating instead of silverized copper dust as originally suggested by Frankel in 1945.

## New Improved Iodine Solution

In a report presented at the American Pharmaceutical Association convention on May 3, 1950, L. Gershenfeld and N. Witlin, described a new and improved antiseptic iodine solution. They remarked that iodine dissolved in many different substances has been utilized for its antiseptic action for 100 years or more. Alcohol has been used as a solvent; water has been used as a solvent; and numerous mixtures of alsohol and water have been used as solvents for this useful substance. When iodine in alcohol is used on open wounds, the alcohol tends to irritate and efforts have been made to reduce the alcohol content or eliminate the alcohol altogether. However, an increase in the amount of water in the solvent or the use of a solution of iodine in water brings about a hazard of freezing of the solution, when iodine preparations are shipped into areas where low temperatures are prevalent, or even if such solutions are exposed in the colder weather experienced in the United States. Should bottles of iodine in water freeze and crack, resultant damage and staining of materiels adjacent to the cracked package would be quite objectionable. Consequently, water containing propylene glycol was chosen as a solvent because it most satisfactorily overcomes both the hazard of freezing and the irritation resulting from alcoholic solutions.

The new formula contains 2 per cent iodine and 2.4 per cent sodium iodide, in distilled water containing 25 per cent propylene glycol. It has a high bactericidal efficiency, does not sting, does not irritate the skin and has a low freezing point. Its free iodine content is equivalent to the present-day iodine tincture. In addition, it preserves a desirable adhesiveness on human skin and mucous membranes. If necessary, excess quantities of the solution may be wiped from the area with cotton or gauze and still leave sufficient iodine to exert an antiseptic action. Such a non-irritating, non-freezing aqueous solution can be employed not only for human and veterinary use, but also in food utensil

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### Astringent Preparations

The term "astringent," when used in the cosmetic sense, means an agent which contracts the blood capillaries or restrains the flow of perspiration. Although there is no obvious chemical relationship between compounds having an astringent action, T. Ruemele (*Manuf. Chem.* 21:104,) 1950 has sought to classify them unto genuine and apparent astringents. Concerning genuine astringents, he states that certain metallic salts, *e.g.* those of aluminium, iron, chromium, lead, zinc, magnesium, and also tannins, belong intrinsically to this class, where, in fact, chemical reaction actually occurs with the skin proteins. As far as the metallic salts are concerned, the activity is associated with the particular cation and its valency.

Cosmetic face lotions and tonics contain the cations in varying combinations in order to accentuate the astringent effect. The skin is dehydrated, tiny blood vessles are contracted and the proteins from the upper cells are precipitated. Since such solutions may readily become irritating, considerable care is needed to determine correct concentrations, The following formulae are given to illustrate the application of astringent cations:

A

| | |
|---|---|
| Glacial acetic acid | 2.00 |
| Zinc sulphate | 0.15 |
| Alum | 2.00 |
| Glycerine | 4.00 |
| Menthol | 0.08 |
| Alcohol | 20.00 |
| Water | 71.52 |
| Perfume | 0.25 |

B

| | |
|---|---|
| Alum | 2.0 |
| Magnesium sulphate | 4.0 |
| Boric acid | 2.0 |
| Formalin | 0.1 |
| Glycerine | 3.0 |
| Alcohol | 20.0 |
| Water | 68.7 |
| Perfume | 0.2 |

C

| | |
|---|---|
| Aluminum chloride | 2.00 |
| Boric acid | 1.00 |
| Glycerine | 4.00 |
| Alcohol | 15.00 |
| Water | 77.75 |
| Perfume | 0.25 |

Aluminum β-naphthol disulphonate (2 to 8 per cent) acts as an astringent, is slightly antiseptic and is particularly deodorant. Aluminum acetate solutions can be used for antiseptic spraying purposes. A typical formula is:

| | |
|---|---|
| Salicylic acid | 30 |
| Aluminum acetate | 30 |
| Acetic acid | 100 |
| Alcoholic solution of various oils | 200 |

Chromium and lead compounds are restricted in use on account of their toxic character, but lead acetate is used for the treatment of certain skin diseases. Soluble zinc compounds are employed for ulcers and eye infections, their action being relatively mild. The insoluble compounds, *e.g.* zinc oxide, frequently provide the astringent constituents in emollient lotions whereby small particles of the metallic oxide will combine chemically with the skin proteins. These lotions can be compounded as follows:

A

| | |
|---|---|
| Calamine, ppt. | 8.0 |
| Zinc oxide | 8.0 |
| Olive oil | 50.0 |
| Lime water | 34.0 |

B

| | |
|---|---|
| Calamine, ppt. | 10.0 |
| Zinc oxide | 5.0 |
| Glycerine | 5.0 |
| Rose water | 80.0 |

C

| | |
|---|---|
| Talc | 0.5 |
| Zinc oxide | 0.5 |
| Glycerine | 1.0 |
| Water | 98.0 |

Tannins, says Ruemele, are known to be valuable astringents. Similarly, the action is due to the combination with the proteins or their decomposition products and the formation of an insoluble residue. Tannins also exhibit styptic activity with the astringent effect, and hamamelis, a tannin-containing material, is widely used. Hamamelis is claimed both to revive and to support the activity of the skin surface. As shown in the following formulae, it is employed as an additive in skin tonics and lotions:

A

| | |
|---|---|
| Zinc phenolsulphonate | 0.227 |
| Camphor | 0.011 |
| Menthol | 0.011 |
| Alcohol | 4.500 |
| Hamamelis water | 45.000 |
| Perfume | 0.022 |

B

| | |
|---|---|
| Sage tincture | 5.0 |
| Hamamelis extract | 25.0 |
| Borax | 5.0 |
| Glycerine | 80.0 |
| Alcohol, 96 per cent | 347.5 |
| Perfume and water | 537.5 |

Alcohol, cold water and other substances are included in the class of apparent or artificial astringents. These materials differ from the true astringents, since they do not react chemically with the skin proteins. It is well known that the application of cold water promotes the closing of the pores and enhances the resistance of the skin. Alcohol is much more effective than water because it increases the rate of evaporation of aqueous solutions and the subsequent cooling action causes a special astringent effect. Astringent alcoholic preparations may be made up as follows:

A

| | |
|---|---|
| Boric acid | 4.0 |
| Glycerine | 1.0 |
| Eau de cologne | 15.0 |
| Alcohol, dil. | 80.0 |

B

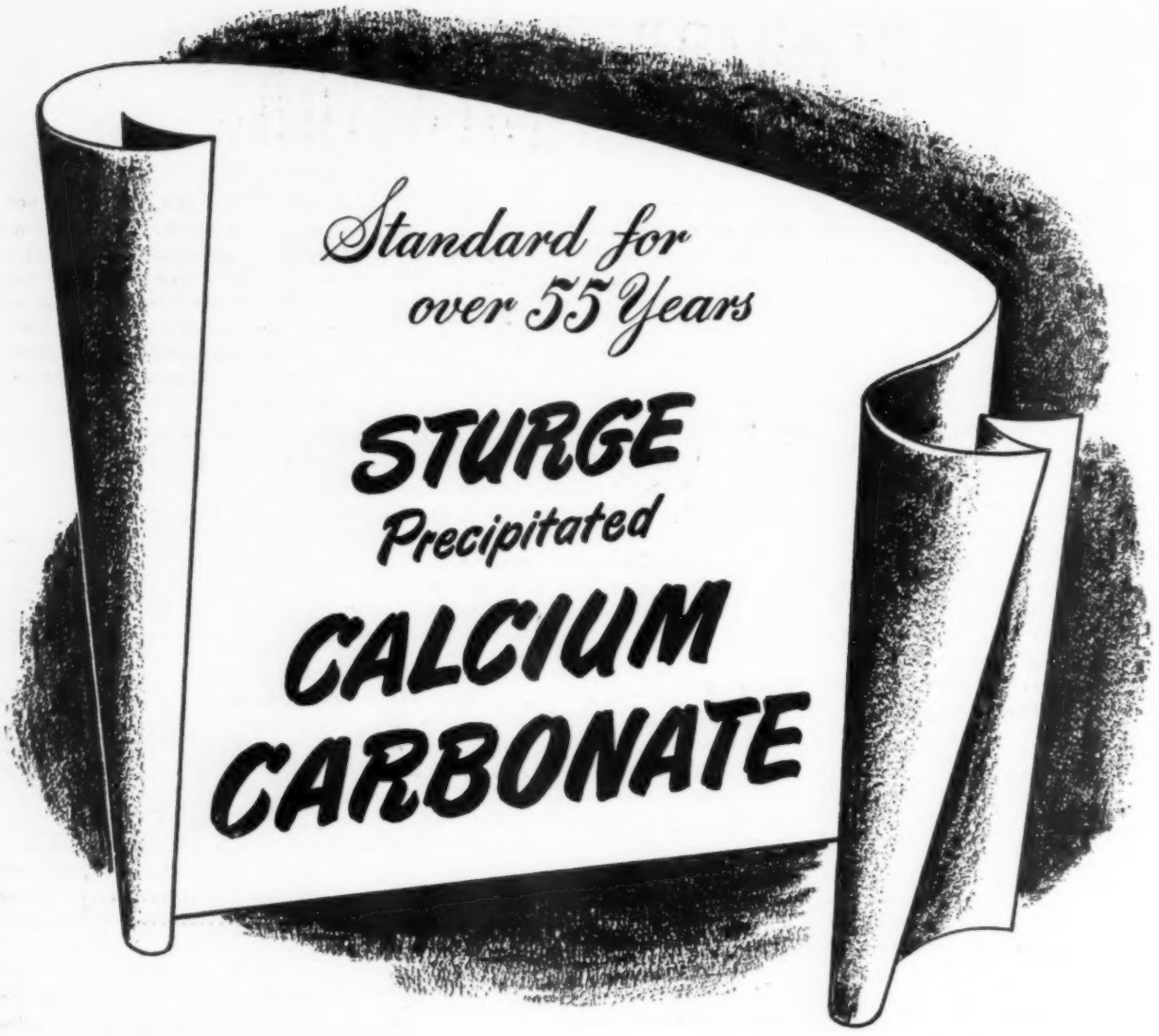
| | |
|---|---|
| Glacial acetic acid | 40.0 |
| Rose water | 100.0 |
| Alcohol, 96 per cent | 300.0 |
| Perfume | 5.0 |

C

| | |
|---|---|
| Alcohol | 425.0 |
| Water, dist. | 415.0 |
| Borax | 5.0 |
| Glycerine | 150.0 |
| Perfume | 5.0 |

Ruemele concludes his discussion with the observation that glycerine, petroleum jelly, gum and alkalies are also credited with contracting properties. The presence of dextrin and starch will substantially increase the contracting action. The composition of face packs and face masks generally includes these materials. The whole mode of action should be absorptive as well as astringent. A satisfactory formula is:

| | |
|---|---|
| Gum arabic | 37.0 |
| Dextrin | 2.0 |
| Boric acid | 0.5 |
| Alcohol | 9.0 |
| Glycerine | 1.0 |
| Cetyl alcohol | 2.0 |
| *Para* hydroxymethyl benzoate | 0.15 |
| Camphor | 0,2 |
| Lavender oil | 0.3 |
| Menthol | 0.1-0.2 |
| Water, dist. to make | 100.0 |

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# READERS' QUESTIONS

*PEARLY SHEEN: Can you give me some information on the pearly sheen that appears in some vanishing creams? What causes it? Can it be obtained with a product using stearic acid? Can you suggest a typical formula? Cleveland.*

It is generally believed that the pearliness which develops on standing is due to the re-crystallization of the unsaponified stearic acid. The method of producing this effect has been discussed by a number of workers. Nowadays it is felt that the best agents for producing sheen are potash, triethanolamine, and the isopropanolamines and other amino compounds. A typical formula for making a pearly cream, suggested by Winter, is as follows:

| | | |
|---|---|---|
| (a) | **Stearic acid** | 44 |
| | **Triethanolamine** | 20 |
| | **Borax** | 5 |
| | **Water, warm** | 450 |
| (b) | **Stearic acid** | 130 |
| | **Liquid petrolatum** | 25 |

To make part (a), saponify the stearic acid with the triethanolamine, and dissolve the soap so formed with the addition of borax in the water. In part (b), mix the stearic acid with the petrolatum and pour this mixture, with stirring, into the warm solution. Cool with stirring and allow to stand for several days for the development of sheen.

*FACIAL CLAYS: Recently, I have had several inquiries concerning the manufacture of facial clays. Since I am rather new to the cosmetic business, I am not very familiar with such products, although I know they were quite popular a few years ago and that they still find some employment in beauty salons. Can you give me any information on such a product, and a typical working formula for making it? New York City.*

Facial clays consist essentially of pastes containing inert materials, water and glycerine. Sometimes various other materials are included. The following formula may be considered representative:

| | |
|---|---|
| **Purified kaolin** | 32.0 per cent |
| **Kieselguhr** | 10.0 " " |
| **Glycerine** | 15.0 " " |
| **Alcohol** | 20.0 " " |
| **Acacia mucilage 2 per cent** | 10.0 " " |
| **Water** | 12.0 " " |
| **Perfume** | 1.0 " " |

Heat the water and glycerine to 170°F. Run it into a mass mixer; add the dry materials and mix for about two hours. Then add the mucilage and the perfume dissolved in alcohol. Greater fluidity can be obtained by increasing the water content.

*MILK OF MAGNESIA TOOTH PASTE: We would appreciate it very much if you would publish a formula for us for milk of magnesia tooth paste, something that you know will work out and make a satisfactory product. Columbus.*

I think that something on the following order, as suggested in Thomssen's text; will serve:

| | |
|---|---|
| **Milk of magnesia** | 24.0 |
| **Precipitated chalk** | 32.0 |
| **White powdered soap** | 2.0 |
| **Glycerite of tragacanth** | 10.0 |
| **Glycerine** | 10.0 |
| **Mineral oil** | 1.0 |
| **Water (distilled)** | 20.0 |
| **Saccharine (soluble)** | 0.1 |
| **Methyl p-hydroxy benzoate** | 0.1 |
| **Flavor** | 0.8 |

Mix glycerite of tragacanth (tragacanth 10 per cent, glycerine 78 per cent, water 12 per cent. Mix with heat). Glycerine and water together, add one half of the chalk, mix; add the milk of magnesia, mix; then the soap and the rest of the chalk. Finally add the saccharin and preservative dissolved in the flavor. Mix well for two hours and mill. In making the milk of magnesia, time can be saved by buying pulverized magnesium oxide and hydrating it with hot water, then passing it through a colloid mill. The finished product should contain the required 7 per cent of magnesium hydroxide.

*ADAPTABLE MASCARA FORMULA: Somewhere, I recall reading a method of preparing a mascara base which could be varied to meet different requirements. Do you have a formula for such a product? Brooklyn.*

I think that the product you have in mind is one given in Thomssen's text "Modern Cosmetics," as follows:

| | |
|---|---|
| **Glyceryl monostearate** | 10.0 per cent |
| **Triethanolamine** | 3.0 " " |
| **Stearic acid** | 15.0 " " |
| **Petrolatum** | 20.0 " " |
| **Gelatin** | 2.0 " " |
| **Water** | 17.0 " " |
| **Beeswax** | 25.0 " " |
| **Prepared lampblack** | 8.0 " " |

Soak the gelatin in hot water. Melt the beeswax, stearic acid, petrolatum and glyceryl monostearate, stir in the lampblack thoroughly. Add the triethanolamine to the gelatin suspension and then add the mixture to the melted mass. Stir well. Any type of mascara can be made from this base, the beeswax being the regulator. By varying the wax content any degree of consistency can be obtained.

# PERFUMER'S SHELF

## Value of Ketene

In discussing the possibilities of ketene in the synthesis of perfumery materials, R. W. Moncrieff (*Manuf. Chem.* 21:9, 1950) states that it is a chemical of rapidly increasing importance. Hitherto its main use has been for the preparation of acetic anhydride by reaction with acetic acid. In the past few years it has been shown that under the influence of suitable catalysts ketene will combine with many types of compounds to give products that should be of interest to many industries. In particular the methyl alkyl ketones and the lactones which it readily yields may add to the resources of the perfumer, while its esters should prove of service to the plastics manufacturer.

In summarizing the data on this substance, Moncrieff states that the main reactions of ketene are as follows: (1) It will condense to the dimer, diketene, (2) Diketene can be reduced in the presence of Raney nickel to β-butyrolactone or at a higher temperature to butyric acid, (3) In the absence of a catalyst, ketene will react with aliphatic aldehydes to give α, β- unsaturated methyl ketones which could doubtless be reduced to methyl alkyl ketones. Ketones do not react in this way with ketene, (4) In the presence of a condensing catalyst such as zinc chloride, β-lactones are made by reacting ketene with either an aldehyde or a ketone, (5) From the β-lactones, the saturated acids may be made by reduction, *e.g.* butyraldehyde and ketene give β-propyl-propionolactone which can be reduced to caproic acid, (6) Unsaturated acids may be obtained by first allowing the β-lactone to form a linear polymer and then distilling it, (7) In the presence of sulphuric acid, or better of acetylsulphoacetic acid, ketene behaves as an acetylating agent and converts an aldehyde or ketene which first enolises into an unsaturated alkyl acetate.

## Color Reactions

Color reactions of oil of cloves, cinnamon, and eugenol have been described by V. Zanotti and A. Zanotti (*Boll. Chem. Farm.* 88:381, 1949). Thus, oil of cloves and eugenol suspended in water give with potassium hydroxide a yellow precipitate which is soluble on shaking. By the same reaction cinnamon oil gives an orange color. On standing a reddish layer separates on the surface; it is soluble in acetone

## Pacific Northwest Peppermint Oils

In a report of a comparative study on Pacific Northwest peppermint oils given before the Scientific Section of the American Pharmaceutical Association on May 3, L. Fischer stated that of the 1,579,000 pounds of peppermint oil produced last year in Indiana, Michigan, Oregon, and Washington, the two Pacific Coast states produced 53.45 per cent of the total. Ideal climatic conditions, nature of the soil, abundant water supply, and freedom from plant diseases enabled Northwest farmers to obtain more oil per acre from peppermint. The 1949 yield per acre in pounds has been reported by the Bureau of Agricultural Economics as follows: Washington, 50; Oregon, 42; Indiana, 33; and Michigan, 21. Fischer also pointed out that in 1948, after a four year study during which 1,059 samples of natural mint oil were analyzed, significant differences in certain United States Pharmacopoeial (U.S.P.) physical standards were discovered in the mint oil obtained from eastern Washington. With approximately twenty per cent of the Northwest production of peppermint oil being supplied by eastern Washington, research work was then resumed to determine the causes of these unusual characteristics. For comparative evaluations, peppermint oil from districts in western Washington and Oregon were also investigated.

These studies revealed that eastern Washington peppermint oil has an unusually high content of a naturally-occurring constituent called menthofurane which causes oil to deviate from the required range designated by certain U.S.P. standards. A quantitative colorimetric method was devised for its estimation and a 4.2 to 5.2 range was found present in western Washington and Oregon oils as compared to 10.6 per cent in the eastern Washington product.

Peppermint oil is the most useful of volatile oils. Chewing gum manufacturers are the largest consumers of this flavoring material, with manufacturers of candies, dentifrices, medicinals, *et cetera* using increasingly large amounts. It is a common practice today among buyers of peppermint oil to emphasize bouquet and flavor; this is accomplished by blending the slightly pungent oils, such as those produced in eastern Washington, with the more bland types obtained from other areas.

## Preparation of Digeranyl Ether

Two methods for preparing digeranyl ether, di (3,7-dimethyl-2, 6-octadienyl) ether, have been given by R. F. Naylor (*J. Chem. Soc.* 1949, p. 2724). In the first process, 22.3 Gm. of geraniol and 3.4 Gm. of sodium in 250 cc. of ether are refluxed for 18 hours. The sodium salt and 10.5 of geranyl chloride are then refluxed for another 18 hours to yield 3.0 Gm. of digeranyl ether, with a boiling point of 132°C. and an index of refraction of 1.4846. In the second method, 100.0 Gm. of geraniol and 25.3 Gm. of potassium in 500 cc. of ether are refluxed for six hours. The resulting salt is refluxed for 12 hours with 112.0 Gm. of geranyl chloride to give 50.0 Gm. of the ether.

## Oxidation Products of Terpinolene

The chemical behavior of the water-soluble oxidation products of terpinolene have been investigated by E. J. Lorand and J. E. Reese and their findings were presented in a paper delivered at the 117th meeting of the American Chemical Society on April 12, 1950. In their work, both the crystalline and syrupy fractions were subjected to dehydration with and without simultaneous hydrogenation, esterification, and oxidation by a variety of agents. It was shown that the three menthenetriols constituting the crystalline fractions (melting point 136°, 124°, and 121°C., respectively) are new compounds; moreover, their hydrogenation products are not identical with any of the known menthanetriols.

Structure determination was completed for the two higher melting crystals (melting point 136° and 124°C.). Thus, peracetic acid oxidation of the menthenetriol melting point 136°C., followed by periodic acid titration of the

resulting trihydric cineole, indicated that the isomer is a 3-*p*-menthene-1,2,8-triol. This conclusion was confirmed by chromic acid oxidation, as applied both to the menthenetriol and to the corresponding menthanetriol, leading to "beta-thujaketolactone" and "homoterpenyl methyl ketone," respectively. The structure of the isomer melting at 124°C. was determined by two independent methods: (a) periodic acid oxidation followed by acid hydrolysis to yield acetone and *p*-cresol, and (b) hydrogenation followed by reaction with hydro-bromic acid to yield Wallach's 1,4,8-tribromomenthane; hence, the compound must be a 2-*p*-menthene-1,4,8-triol.

## Oxidation of Isoborneol with Chromic Acid

The oxidation of isoborneol with chromic acid has been reported to give 70 per cent camphor. Because the carbonium ion derived from this terpene alcohol undergoes rearrangement readily, its oxidation was studied by W. A. Mosher and E. O. Langerak in order to obtain information on the mechanism of oxidation. According to the report delivered to the American Chemical Society meeting on April 12, 1950, they have obtained yields of camphor as high as 96 per cent and in addition two products not previously reported from this oxidation: 2 per cent α-campholenic acid, and 2 per cent of a new terpene-derived hydroxy acid, 1,2,2-trimethylcyclopentanol-3-acetic acid. The fact that no camphene or its oxidation products were found indicates that dehydration did not precede oxidative attack.

## Constituents of New Zealand Cedar Oil

Results of studies on the essential oil of New Zealand cedar (*Libocendrus bidwillii*) have been reported by R. D. Batt and C. H. Hassell (*J. Soc. Chem. Ind.* 68:359, 1949). In their work, the autumn oil, obtained in 0.29 per cent yield by steam distillation of leaves and terminal twigs, was fractionated under reduced pressure, using a 91 cm. vacuum-jacketed fractionating column. By this method the following fifteen constituents have been separated: *l*-α-pinene (24.8 per cent); *d*-sabinene (3.3 per cent); myrcene (2.7 per cent); ketone ($C_{10}H_{16}O$) (3.7 per cent); limonene and dipentene (7.4 per cent); *p*-cymene (3.4 per cent); terpinolene (0.7 per cent); terpinen-4-ol (1.2 per cent); unidentified tricylic sesquiterpene (1.6 per cent); unidentified sesquiterpene (3.7 per cent); caryophyllene (3.0 per cent); γ-curcumene (18.4 per cent); *d*-cadinene (2.7 per cent); green oil (5.8 per cent) and tar (including hydrocarbon) (8.2 per cent).

## Estimating Safrole in Sassafras Oil

In a discussion in the *Perfumery and Essential Oil Record* (40:422, 1949) W. R. Littlejohn observes that until recently practically all the world's sassafras oil was produced in the United States, and all investigations on the oil were carried out with oil of North American origin. In the last few years, however, increasing quantities of oil have been produced in Brazil. The Brazilian oil differs from the American oil in many ways. This has brought out the need for better analytical methods.

As noted by Littlejohn, the quality of a sassafras oil is usually evaluated by a determination of its safrole content. Safrole is 3:4-methylene-dioxyallylbenzene, and as its constitution does not allow of an easy chemical method of assay, resource has to be made to physical means. The two methods usually employed are those of fractional distillation or a freezing-point determination. The freezing-point method has been used with success for the estimation of other essential oils and its adoption for sassafras oil analysis was suggested by Guenther, in his recent book on *The Essential Oils* (Vol. I, p. 329). Work along these lines has been done in Brazil, through the Technical Secretariat. Through their investigations, the Brazilian technicians have developed a cryoscopic method for the determination of safrole in sassafras oil. The following equipment is required: 1. Dry test-tubes, about 20 mm. in diameter. 2. Very accurate thermometer, in graduations of 0.1°C., and ranging from 0 to 11°C. 3. Ordinary thermometer for the air jacket. 4. Large tube, or wide-necked flask, to form an air jacket round the tube containing the sample in the refrigerating bath. 5. A beaker of suitable size for the refrigerating bath. 6. Refrigerating bath—water and crushed ice. 7. Sodium sulfate. 8. Crystallized safrole.

The actual determination is made as follows: Pour into the test tube about 10 cc. of the sample, after having previously dehydrated it with sodium sulfate. Plunge the tube directly into the refrigerating bath, which should not go beyond the level of the sample, until the temperature of the latter is about 5°C. below the expected freezing point. Transfer the tube to the inside of a larger one which is plunged into the same bath, and fix it with a cork. Place on the thermometer reservoir a very small quantity of crystallized safrole and stir the sample rapidly with the thermometer, preferably in a vertical direction, so that crystallization occurs uniformly throughout the mass. When the temperature begins to rise, watch it frequently. Stirring can be continued, but gently. When the final point is nearly reached, take care that the thermometer does not touch the sides of the tube. The highest temperature reached which remains stable for a certain time is the freezing point. The divergence between parallel determinations must not exceed 0.1°C.

By means of the following table it is possible to determine, from the freezing point, the safrole content in per cent by weight:

| *Safrole percentage of weight* | *Freezing point (°C.)* | *Safrole percentage of weight* | *Freezing point (°C.)* |
|---|---|---|---|
| 69.1 | 2.4 | 90 | 8.3 |
| 73.3 | 3.7 | 91 | 8.6 |
| 76 | 4.4 | 92 | 8.8 |
| 79 | 5.2 | 93 | 9.2 |
| 82 | 6.1 | 94 | 9.4 |
| 85 | 6.9 | 95 | 9.7 |
| 86 | 7.2 | 96 | 10.0 |
| 87 | 7.5 | 97 | 10.3 |
| 88 | 7.8 | 98 | 10.6 |
| 89 | 8.0 | 99.5 | 11.0 |

It is suggested that the interpolation of the results can be made easier by drawing a graph.

## Bactericidal Properties of Essential Oil Components

Data on the relationship between certain components of essential oils and their antibacterial properties has been obtained by S. M. Bose, C. N. Bhima Rao and V. Subramanyan (*J. Sci. & Ind. Research* 8B:160, 1949). In their studies, phenol coefficients for 1 per cent emulsions of these compounds were determined by the Rideal-Walker test, as follows: citral 20.0, geraniol 15.5, methyl geranyl ether 4.5, geranic acid 2.5; citronellal 12.5, citronellol 8.0, methyl citronellyl ether 1.0, citronellic acid less than 1.0; cinnamaldehyde 16.5, cinnamyl alcohol 11.0, methyl cinnamyl ether 3.0, cinnamic acid 2.5, hydrocinnamaldehyde 8.0, hydrocinnamyl alcohol 5.0, methyl hydrocinnamyl ether 1.0, hydrocinnamic acid less than 1.0. In correlating chemical structure with activity, the order of decreasing effectiveness was: aldehyde, alcohol, ether and acid. Unsaturation generally and particularly the presence of the alpha, beta-double bond enhanced the germicidal activity.

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# ADVANCING THERAPY

## Vitamin K vs. Dicumarol

Dicumarol, say R. Miller, W. P. Harvey and C. A. Finch (*New England J. Med.* 242:211, 1950) is of proved value in the prophylaxis and treatment of thromboembolic disease. In recent years it has come into general clinical usage. The narrow margin between a clinically effective prothrombin level and the prothrombin level at which bleeding occurs imposes a certain hazard in treatment. Even with the most careful management of Dicumarol therapy, an unsuspected complication such as an asymptomatic peptic ulcer may result in fatal hemorrhage.

In the event of hemorrhage it is of the utmost importance to remedy quickly the coagulation defect produced by Dicumarol. The two measures recommended for this purpose are the administration of vitamin K preparations and blood transfusion. The literature suggests that synthetic vitamin K preparations are effective when given intravenously in large doses. These workers note that water-soluble synthetic vitamin K preparations have been referred to frequently in clinical articles as an effective means of counteracting Dicumarol toxicity. To test this view, the antagonism of therapeutic amounts of Dicumarol by vitamin K preparations has been studied in animals and man. Under the conditions of the experiments water-soluble vitamin K preparations had no antagonistic effect. Vitamin $K_1$ and, to a lesser degree, vitamin $K_1$ oxide were very effective in decreasing the prothrombin time. On the basis of these and other clinical observations it is suggested that vitamin $K_1$ and $K_1$ oxide provide the only known effective means, except blood transfusion, of treating the bleeding emergency of Dicumarol toxicity.

## Succinic Dinitrile in Psychiatry

Having abandoned malononitrile because of its toxicity, J. Delay and his associates (Paris Letter, *J. A. M. A.* 142:666, 1950) studied other dinitriles to find a better agent. They have retained succinic acid dinitrile ($CN\text{-}CH_2\text{-}CH_2\text{-}CN$) because its toxicity is more constant in various animals and 6 to 10 times less toxic than the malononitrile. Its preparation is easier and its preservation better than that of malononitrile. After experimenting, the workers arrived at an almost standard dose of 20 cg. per injection, representing about 4 mg. per kilogram of body weight. A large dose causes signs of intoxication and necessitates the administration of sodium thiosulfate, but they prefer it to a smaller dose because it has a more lasting effect. Injections were given intravenously every other day, although a few subjects received intramuscular injections. The first results led the investigators to use succinic acid dinitrile in depressive states and in certain hypochondriac or cenesthopathic conditions with anxiety and a typical depressions. Of 12 patients, 5 were discharged as cured after treatment comprising five to twelve injections over a period of two weeks to one month; 4 were much improved after five to eight injections; of 3 improved patients, 1 with severe involutional depression was sufficiently improved after six injections to permit probational discharge. In 3 of these patients electroshock therapy had failed. Tolerance to the drug has been satisfactory regardless of mode of administration, and an injection of sodium thiosulfate has not been necessary. A few hours after the injection, a slight congestion of the face appears, although neither pulse nor tension show any noticeable modification. Some patients reported a feeling of drowsiness in the course of the day.

## Dehydroergotamine for Shingles

The value of dehydroergotamine methanesulfonate, also known as Dehydroergotamine 45 or DHE45, in the treatment of pain caused by herpes zoster or shingles, is indicated in the report of F. C. Combes, O. Canizares and S. Simuangco (*J. Investig. Dermat.* 14:53, 1950). Their study of results obtained in the treatment of 40 cases of herpes zoster with pain shows that Dehydroergotamine 45 controlled the pain in 30 of 40 patients (75 per cent). In 17 instances the results were classified as "excellent" and in 13 as "satisfactory." There were 10 "failures." These included one patient with leukemia, one with primary pulmonary carcinoma with metastases and 4 with post-herpetic pain of protracted duration. The location and duration of the eruption did not influence response to therapy except in instances of long standing post-herpetic pain. The clinical course of the eruption was not affected by the medication. In those instances where treatment was started early, new crops of vesicles often appeared after the first injection. In most patients these vesicles dried in an average of one to two weeks.

There was no appreciable advantage in intravenous administration except that results were more prompt. In most cases the intramuscular route was satisfactory. The dose of 1 cc. was found to give good results, but when it failed a larger dose (2-3 cc.) was often successful. The duration of relief from pain varied from 8 hours to 4 days. There were no serious side-effects.

## Promacetin for Leprosy

Search for a drug of the lowest possible degree of toxicity and of the highest possible therapeutic efficiency in leprosy led to the clinical evaluation of Promacetin by F. A. Johansen and his associates (*Public Health Repts.* 65:195, 1950). Promacetin is sodium 4,4'-diaminodiphenylsulfone-2 acetylsulfonamide. It is a white crystalline compound soluble up to 3 per cent in water at room temperature. This drug has been reported to be of relatively low toxicity. Studies indicated that even with massive doses by mouth the blood level of the drug will seldom attain dangerous proportions.

From studies on 27 patients, objective clinical improvement of skin and mucous membrane lesions of lepromatous leprosy is observed to occur following the oral administration of Promacetin. The improvement noted is uniform, universal and sustained; therefore, it cannot be wholly attributed to spontaneous factors. Reduction in the number of leprosy bacilli in the skin and mucous membrane follows clinical improvement. Skin smears commence to show a noticeable reduction of bacilli at the end of one year's treatment while many patients show an absence of bacilli in the mucous membrane at this time. Promacetin is well tolerated orally even upon prolonged administration of doses as high

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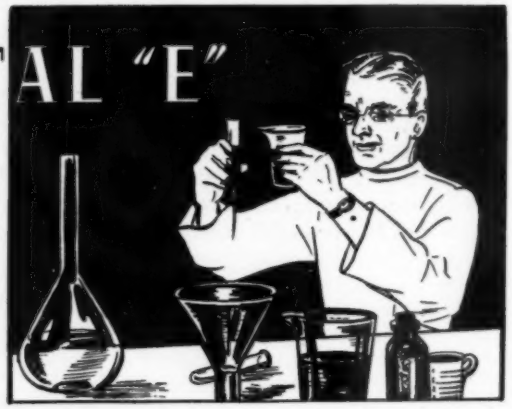

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### Niacin Therapy of Dermatitis Herpetiformis

In the *Journal of Investigative Dermatology* (14:233, 1950), H. H. Johnson, Jr. and G. W. Binkley report that in a series of 12 patients with dermatitis herpetiformis of various degrees of severity, the oral administration of niacin in doses of 50 to 200 mg. four times daily relieved the pruritus and improved the cutaneous manifestations. The disease was completely suppressed in 6 or the cases, partially suppressed in four. Little or no improvement was observed in two cases. Niacin produced no permanent remissions, but had to be taken in maintenance doses or resumed at the onset of a relapse.

They point out that niacin is not a specific for dermatitis herpetiformis, but exerts a suppressive effect in approximately half the cases and varying degrees of partial effect in an additional one-third of the cases when given in doses which are able to produce fleeting clinical vasodilatation. They found that niacin amide, which produces no vasodilatation, was relatively ineffective in 6 of the 12 cases. Although one must consider that niacin benefits dermatitis herpetiformis simply through a vascular effect, it is possible that it produces its effect in some other manner such as on the intercellular respiratory enzymes.

### Aureomycin as a Growth Accelerator

The discovery that the antibiotic, aureomycin also can serve as a potent growth factor was announced by E. L. R. Stokstad and T. H. Jukes at the 117th meeting of the American Chemical Society. It was noted that although aureomycin's hitherto unsuspected nutritional powers promise to be of importance primarily in extending the world's meat supply and decreasing its production costs, they may also prove directly beneficial to human health by aiding the growth of malnourished and undersized children. Clinical investigations of this possibility are now under way. Up to now aureomycin, like penicillin, streptomycin, and the other antibiotic drugs, has been regarded solely as a weapon for fighting disease.

The growth-promoting value of aureomycin was discovered in the course of research on vitamin B-12, another powerful growth stimulator. Chicks and turkey poults as well as pigs have registered unprecedented gains upon receiving minute quantities of the drug in the form of a finely ground powder mixed with their feed. Aureomycin, in the experiments conducted so far, has been found to produce a growth response that cannot be duplicated by any of the vitamins known at the present time, even when added in many times the normal requirement. No undesirable side effects have been observed.

Exactly how aureomycin works in speeding growth is something yet to be determined. Since other antibacterial agents with widely differing chemical structures can produce similar though less dramatic results, it seems unlikely that aureomycin functions as a vitamin. It is more probable that it inhibits growth of certain detrimental microorganisms in the intestinal tract. These bacteria may rob the intestine of some unknown vitamin, or they may produce a toxic compound.

### Benzyl-imidazoline—Potent Vasodilator

In a study of vasodilators in the treatment of peripheral vascular diseases, A. H. Douthwaite and T. R. L. Finnegan (*Bril. Med. J.* 1:869, 1950) came to the conclusion that benzyl-imidazoline is a powerful vasodilator which seems to exert its main effect on the arteries and arterioles of the extremities; only in larger doses does it give rise to widespread dilatation and fall of blood pressure. It is singular in that, in contrast to other vasodilators, it has only transient effect on the blush area but has striking and prolonged influence on the vessels of the fingers and toes. Although the study of the pharmacology is not yet complete, it seems that the main effect of the drug is that of a sympathicolytic substance, but, in spite of earlier statements to the contrary, it is probable that there is also some direct effect on the vessel wall independent of the sympathetic supply.

When tested for its value in the treatment of peripheral vascular disorders, benzyl-imidazoline (known by the trade name of "Priscol") has been found to have a more lasting vasodilator effect than other drugs commonly employed for this purpose. It has an elective affinity for the smaller arteries and arterioles of the fingers and hands and toes. It is relatively non-toxic, but may produce certain unpleasant side-effects, which can usually be avoided by suitable gradation of dose. It is outstandingly successful in the treatment of Raynaud's disease and of appreciable value in that of intermittent claudication of arteriosclerotic origin. It should not be used for the treatment of arterial hypertension. The weight of evidence is that it is of little value in thromboangiitis obliterans, but even here it is worthy of trial.

### Studies on Banthine, New Anti-Ulcer Drug

As explained by J. W. Cusic and R. A. Robinson to the Division of Medicinal Chemistry at the 117th meeting of the American Chemical Society on April 11, 1950, the object of their investigations was to find an autonomic ganglion blocker such as tetraethylammonium bromide but having oral activity and fewer side effects. To this end an extensive research program was inaugurated several years ago which involved the preparation of many types of quaternaries. The results given represent only a small portion of this program and deal with quaternaries of basic esters which were prepared several years ago and studies as spasmotytics. These compounds were basic esters of fluorene-9-carboxylic acid, xanthene-9-carboxylic acid, 9-10-dihydroanthracene-9-carboxylic acid, benzilic acid, and diphenylacetic acid. Some new esters of these acids are reported together with their quaternaries and some new basic esters of tropic acid and their quaternaries.

These compounds were subjected to at least three pharmacological tests; (1) antiacetyl choline activity in the isolated muscle strip, (2) the lachrymatory response in the rat and (3) autonomic blocking action in the sympathetic system. As a result of these tests one compound (SC-2910) was selected for more extensive study. SC-2910 is β-diethylaminoethylxanthene - 9 - carboxylate methobromide. In respect to the first test, SC-2910 is 0.7 as active as atropine, in the second test it is roughly 0.6 as active as atropine, and in the third test it is equal to tetraethyl ammonium bromide.

These activities were confirmed in clinical trial by Grimson and Associates of Duke University, who also did much animal work with it (Fed. Proc., *8*, 25 (1949)). They found that SC-2910 greatly reduced gastric motility in both dog and man by either oral or parenteral administration. It has shown great promise in the oral treatment of peptic ulcer and is apparently well tolerated by man. The product has been given the name, "Banthine."

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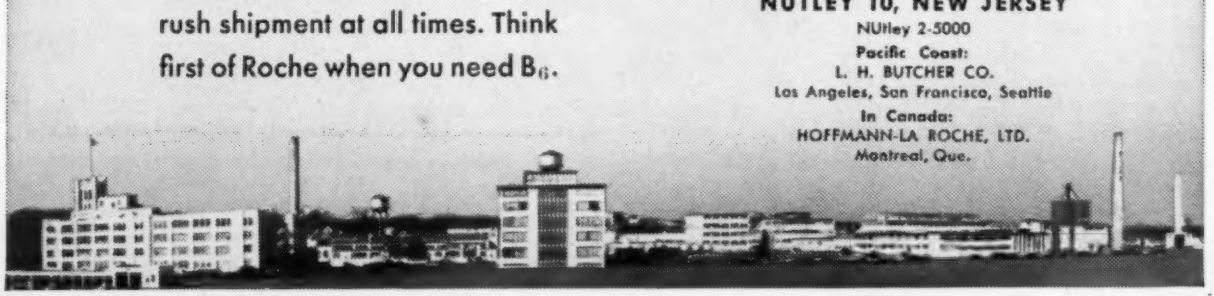

# ABREAST OF THE MARKETS

## MARKETS REMAIN FIRM; RISING LABOR COSTS EXPECTED TO AFFECT PRICE OF DOMESTIC BOTANICALS; CARNAUBA WAX STILL UNSTEADY

The essential oils exhibited considerable activity during May, although the over-all status of the market was quite stable. Some commodities increased in price as a result of scarcities and shipping problems, while others decreased in price, owing to competitive forces and expanding supplies. This condition is reflected in the May issue of the *Fritzbro Reporter* which states that "essential oil markets generally seem reasonably stabilized at present levels subject to the usual seasonal fluctuations. There are and will continue to be some notable exceptions so long as the world situation is beset with wide-spread political and economic disturbances . . . Consumers of essential oils will in general be well advised not to permit raw material reserves to become too low."

There was little immediate change in the botanical field; however, an authoritative source indicated that a general advance in the value of domestic items would most probably develop late in the summer at the end of the harvesting period. Several foreign botanicals, like agar and papain, are also expected to jump ahead when current stocks have been depleted and replacements are ordered from the source.

The main factor in the anticipated increasing prices of domestic botanicals is the cost of labor. At best, a part-time job, botanical collecting will soon be at its height with pickers scouting about the fields and denser areas, mainly in the southeastern portions of the United States, seeking various types of plants. Making the excursions in family units, these groups will carry half a dozen or more bags, each one reserved for a separate herb. The groups will comb the herbaceous areas, plucking stems, digging up roots, and stripping barks, the latter during the dormant season when sap is not running.

Not only must the pickers be acquainted with the market conditions before they seek the herbs which are most in demand, but they must also know precisely at what stage in their growth to pick them. Roots of annual plants, for example, should be dug up just before the flowering period, according to a Department of Agriculture publication published expressly for the benefit of these pickers; roots of biennial and perennial plants should be collected late in the fall or early spring; leaves and herbs, during the flowering period; and flowers, when they have first opened.

After each day's picking the collectors return to their homes and add the day's yield to the growing supply. Unless the roots are properly cleaned and dried, they will become moldy; leaves, too, must have special care and should be spread out in a well-ventilated room to prevent discoloration. Each type of botanical must be handled in a specialized manner to prepare it for future sale.

The collector periodically gathers his yields and takes them to the local dealer, and unless he has taken precaution to determine which plants in his community will offer the best opportunity for profit, he may suffer severe losses in time and money owing to a glutted market.

Because of the recently approved 75c hourly minimum wage law, would-be botanical collectors are rapidly becoming aware of the fact that they can find other jobs of manual labor which fall under the jurisdiction of this wage law. It behooves the dealer, therefore, to pay these pickers well enough to keep them on the job or to lure them back from other jobs. Since he pays his men according to the weight of botanicals picked, the dealer must therefore pay the pickers a substantial enough sum so that at the end of the day's work the wage will average up to approximately 75c an hour in order to compete with the legal minimum of a full-time job.

Herb picking is far from a pleasant task; it is difficult, tedious, and back-breaking work. Successive generations of workers, according to an observer in the southern states, have migrated from this severe work to softer jobs with higher pay. In paying these workers higher rates per pound, the dealer must increase his expenses and in turn pass the added cost onto the botanical houses, which will then revise their prices upward. It is this upward revision which is anticipated during the late months of the summer.

Up to this time, the rising cost of botanical collecting has not shown much effect on the general market because dealers are apparently persisting in selling at low prices to consummate immediate sales, rather than prepare for the future by heeding economic signs which point to a rising market. These low-price sellers, as they are called, will eventually be forced to increase their prices, according to one source, only the longer they wait, the more sudden will be the change.

Such a trend has already started in cascara sagrada. Bark peelers are today receiving 20 per cent more in wages than they were paid last year; yet the yield is still very disappointing. Dealers' inventories last year were the lowest since the war, owing to the hope that prices would decrease. The unsettled condition in world trade is also tending to prolong this condition, since the dealers do not want to be caught with too much stock on hand in the event of a sudden shift in economic conditions.

• Prices quoted in this section were current on the first of this month.

### Carnauba Wax Outlook Doubtful

The perplexing situation in carnauba wax has not cleared up since the inception of trade by barter in April, and no one is willing to offer a guess as to the final outcome as yet. Early in May carnauba No. 1 advanced from 83c to 88c, with very few offerings coming out of Brazil. Toward the end of last month, the wax price extended from 94c to 95c, when it was indicated that supplies in Brazil were so meager that shippers were having extreme difficulty in filling commitments to the United States.

(*Continued on page 742*)

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## FROZEN JUICE MARKET TENDS TO KEEP ORANGE OIL PRICES LOW; MENTHOL ADVANCES UNEXPECTEDLY; ANISE OIL DROPS

The prices of orange oil are being kept at salvage level, according to H. P. Wesemann, in an address before the Flavoring Extract Manufacturers Association of the United States, because of large production, not only of the oil but also of the frozen juice and concentrates. The oil has continued to be available at these low prices, to a great extent, because of the very strong demand created by the frozen juice industry for the orange itself. Once this industry has extracted the juice from the fruit, there remains the skin which contains the orange oil. This has become an important by-product of the frozen juice market.

Because this industry is relatively new on the scene, it is causing a new and different effect on the Florida orange oil industry, as indicated by the California Fruit Growers Exchange which reduced its prices in June, 1949, on orange oil USP XIII California cold pressed from $1.75 per pound to $1. There has been no change since that time.

According to some sources, the large demand for the frozen juice has brought about an overproduction of orange oil. Several factors could possibly alter the outlook of this dilemma and return the oil market to a more secure position. If, for example, the demand should swing away from the frozen juice market and settle on the fresh fruit industry, this might tend to reduce the surplus of potential orange oil in the form of orange skins. During the summer months when the demand for soft drinks usually reaches its height, more of the oil would be used, but, according to a spokesman in the trade, this development would have but slight effect on the general picture because there is at present so much oil on hand.

To show the tremendous effect the frozen juice industry has had on the orange oil market, Mr. Wesemann pointed out that "if oranges had to be purchased for the sake of oil production alone, one pound of oil would be worth $86." Since the oil has become a by-product, however, the price has been kept low.

### Menthol Up Unexpectedly

Menthol rose suddenly during the latter part of May to the level from $12 to $12.25 per pound. It had been quoted from $10.25 to $10.40 during April, with little activity expected. Several factors seem to be concerned with this development, among them, the fact that the new menthol crop in Brazil is only about 60 per cent of last year's crop. This, coupled with the heavy exports to other countries, including Europe, has tended to tighten the market during a period of the year which is normally quiet in regard to consumption.

Although Brazilian shippers were quotting the June-July shipment as $12.20 per pound c.i.f., which would bring the spot price to approximately $12.60, no dealer in New York was willing to make commitments that far ahead. One source of information has indicated the possibility that a reversal may occur in the market during July and August when new-crop material may be offered from China. If the Chinese market should quote lower prices than those emanating from Brazil at that time, as is very possible, the market would soften.

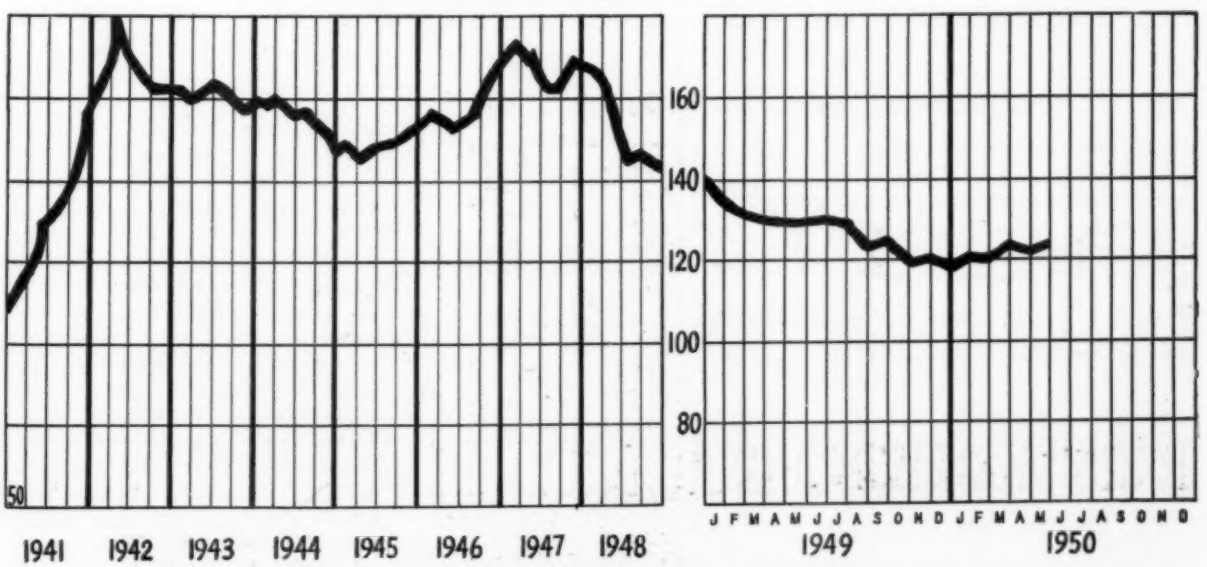
Scattered shipments have been arriving from China during the past few months, but these have recently dwindled considerably, a development which has also added to the current tight situation in menthol.

Declared exports of menthol to the United States through Shanghai, China, during February, 1950 amounted to 7,800 pounds, valued at $64,710. During the year 1949 such exports were 23,220 pounds, valued at $221,930.

### Anise Down, Cassia Up

During the past three months anise oil has crept down from $1.45 to the present level of $1.10, while cassia oil, also having its origin in China, jumped ahead 25c in May. It has been reported that the Communist government in China is planning to foist a government loan on the merchants, who will be expected to subscribe to these bonds, for which they will have to exchange warehouse stocks of merchandise. The holders

50 Raw Materials—Weighted Price Index. 1926 = 100.




The price index of fifty commodities for May advanced from 123.4 to 124.9.

## MAY PRICE CHANGES

**UP**

Apricot Kernel oil 2c
Balsam Tolu 30c
Carnauba Wax, No. 1 11c
North Country No. 32c
Cascara Sagrada 2c
Casia Oil, Redist. 25c
Cinnamon Bark Oil $4
Citronellol 10c
Eucalyptus Oil 7c
Fennel Oil 50c
Geranium Oil, Bourbon, 25c
Menthol, Natural $1.75
Ouricury Wax 2c
Passion Flower 5c
Rhatany Root 2c
Sage Oil 50c
Saw Palmetto Berries 10c
White Pine Bark 5c
Witch Hazel Bark 2½c
Wormwood Oil 60c

**DOWN**

Aconite Root 10c
Almond Oil, Sweet 5c U.S.P.
Anise Oil 20c
Anisic Aldehyde 10c
Buchu Leaves 10c
Camphor Oil, Sassafrassy 11c
Cananga Oil, Rectified 50c
Caraway Oil 50c
Coriander Oil $1.50
Dill Oil $1.50
Jaborandi Leaves 2c
Japan Wax 2c

of anise oil, therefore, are apparently trying to unload their supplies overseas ahead of the deadline according to the report, so that, rather than receive probably worthless government bonds, they will be paid in American dollars.

The increased price of the cassia oil has been attributed to very small stocks on hand in China, since shippers are offering small drum lots which have been limited in number.

### Carnauba Wax Outlook Doubtful

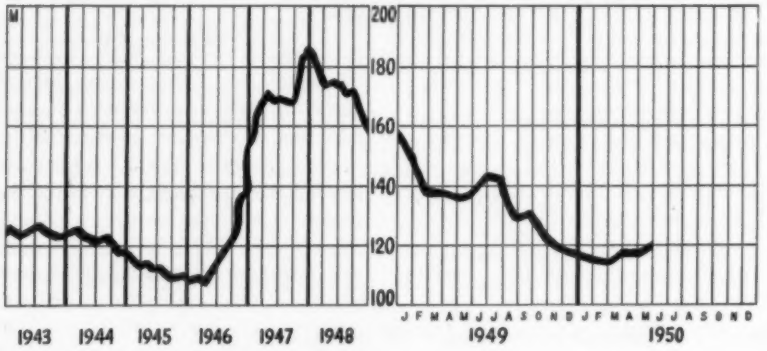
*(Continued from page 739)*

According to a spokesman in the trade, it is very possible the price may continue to advance, should stocks at the origin remain small and should Brazilian exporters fail to offer any further bids. On the other hand, the market may soften abruptly if shipments of the wax now enroute to New York should prove large. At the present time dealers in New York are holding on to their supplies and are hesitant about letting any go.

Exports of carnauba wax from Brazil in 1949 reached one of the highest totals on record. They amounted to 11,110 metric tons, according to a Department of Commerce publication, which states that this figure has been exceeded only twice before, in 1941 and 1944.

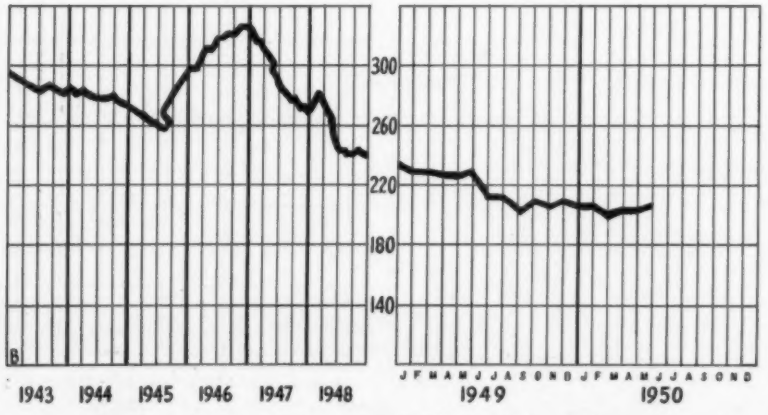
The United States was the largest purchaser, taking almost 80 per cent of the total. Smaller markets which had been affected by the war resumed or increased purchases.

**15 Medicinal Chemicals—Weighted Price Index. 1926 = 100.**




The medicinal chemicals index advanced from 118.6 to 121.3. Menthol went up $1.75.

**15 Botanicals—Weighted Price Index. 1926=100.**




The botanicals index advanced from 202.6 to 205.1. Balsam tolu and cascara sagrada were up, buchu leaves fell off.

### Cod Liver Oil Production

Production of cod liver oil in Norway during the calendar year 1950 will probably be higher than in 1949, according to the *Foreign Commerce Weekly*, which has based this prediction on the fact that the cod catch and medicinal-cod-liver-oil output were 17.4 per cent and 27 per cent greater, respectively, in the period from January 1 to March 25, 1950, than in the corresponding period of 1949. This period accounts for two-thirds of the total annual production.

Total estimated 1949 output is estimated at approximately 2,300,000 gallons, consisting chiefly of steam-refined cod liver oil.

Exports of steam-refined cod liver oil during 1949 amounted to 1,374,582 gallons, compared with 1,880,213 gallons in 1948 and 2,592,481 gallons in 1947.

### Vanilla Beans Unchanged

The vanilla bean market remained firm last month, with no change occurring in price. The outlook for the future, according to one source, is expected to be bright, along with increased European consumption.

### Papain Higher at Origin

Although spot prices on papain today are not much more than the low figures which prevailed during the war, prices at the origin are currently from 60 per cent to 80 per cent higher then they were six to eight weeks ago. Dealers in this country are failing to anticipate, it seems, the very sizable increase in the price of the item at the origin and are selling the product at a low price as long as possible, feeling that if they should up the price now, they would lose customers to competitors. On the other hand, this delaying is going to make the inevitable upward revision all the more difficult when their spot supplies have become exhausted. At that time, dealers will be forced to purchase papain at ad-

vanced prices from the origin, a move which will melt their apparent profits of the preceding twilight period.

### Agar Change Anticipated

The same situation exists in agar as in papain, only to a slighter degree. Prices at the origin, according to one source, are about 20 per cent higher than they were five or six weeks ago. In this case, too, an increase is anticipated, either as a precautionary measure to prepare for the day when it will be necessary to buy new material from the origin at a higher figure, or as a last resort, after the spot supplies have dwindled.

### Russian Shipments to U. S.

Invoices covering shipments of the following essential oils from the U.S.S.R. to the United States were certified on April 3, according to a report by the *Foreign Commerce Weekly:* Rose oil, 35 kilograms ($33,442); pine needle oil, 5,924 kilograms ($26,123); coriander oil, 400 kilograms ($14,000). The rose oil was of Bulgarian origin, whereas the two others were products of the U.S.S.R.

### Little Cascara Bark on Hand

Cascara sagrada advanced during May from 29c to 31c. Information has been received that there is very little carryover of 1949 cascara bark on hand, and that this year's crop is not expected to be any better than that of last year.

### Citronella-Oil Exports

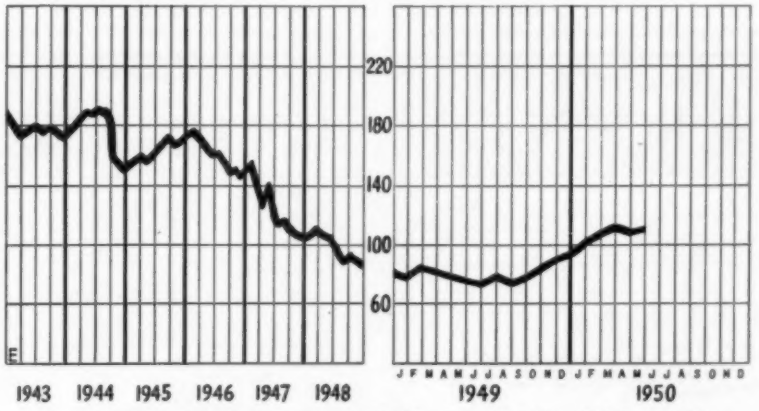
Citronella-oil exports from Indonesia during February 1950 were 6 metric tons, valued at 56,000 guilders (U.S. $1 = 3.80 guilders) compared with 24 metric tons, valued at 236,000 guilders, during January, 1950.

Indonesia exported 446 metric tons of citronella oil, valued at 2,162,000 guilders, compared with 1948 exports of 469 metric tons valued at 1,779,000 guilders.

### Coriander Oil Down

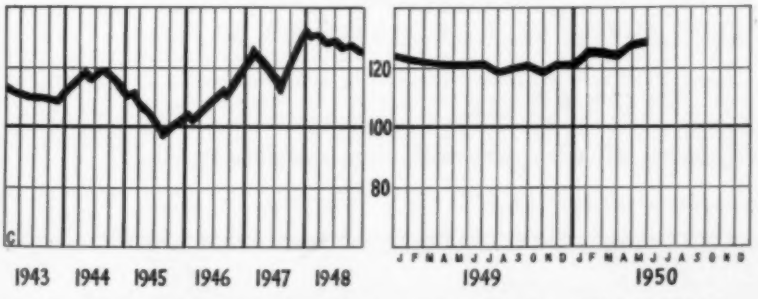
Coriander oil fell off during May from the previous range of $25 to $28 to the current one of $23.50 to $26, presumably because supplies have recently been arriving in large quantities, tending to create a surplus in spot stocks.

**15 Essential Oils—Weighted Price Index. 1926 = 100.**




The essential oils index advanced slightly from 107.6 to 108.1. Cassia oil and eucalyptus oil were higher; anise oil was lower.

**25 Cosmetic Raw Materials—Unweighted Price Index. 1926 = 100.**




The cosmetic raw materials index advanced slightly from 128.0 to 129.3. Balsam tolu and menthol went up; Japan wax went down.

### Balsam Tolu Stronger

Balsam tolu advanced 30c in May, reflecting the strong replacement quotations at the origin. Offerings last month ranged between $3.35 on the inside and $3.75 on the outside, with demand being maintained on a steady basis.

### Peppermint May Be Late

One source has indicated that this year's peppermint crop may be several weeks late due to wet weather which delayed cultivation of the fields. It has been said that most of the oil of high menthol content has been used and that there remains mostly low-test oil on the market. According to this source, the low-test material will be held until August when it will be blended with the new crop.

### Spearmint Oil Steady

The inside prices ($3.25) of spearmint oil remained steady last month, but one source suggested an upward revision of the $3.40 outside price. Firm conditions are expected to prevail until the collection of new crops

### Bourbon Geranium Oil Up

Bourbon geranium oil advanced 25c during May to $17, as reported by one essential oil house, while another source quoted the figure of $17.50 for the inside price. The upper range of the oil extends from $18 to $18.50. There was no change in the African oil during the month.

Both the Reunion and Algerian geranium oils have been on the increase for over a year. In May of 1949, for example, the Algerian oil ranged from $10.50 a pound for the regular grade to $11.50 a pound for the extra quality, while the same grades of the Reunion variety extended from $11.75 to $12.75, which prices in each case were about $5 less than current quotations.

Stocks of the Reunion geranium oil in the primary market at the present time appear to be very low. This condition, coupled with information recently received that the coming crop will probably be less than half the normal quantity, has automatically tended to increase not only the interest in the African variety, but the price as well. It has been pointed out by one source that Algerian prices are also highly competitive because of limited production, rather than increased demands from Continental Europe.

In normal times when ample quantities of either oil are available, there is relatively little demand for the Algerian variety as compared with the Reunion.

## New Drugs for Tuberculosis

*(Continued from page 659)*

pressed tablets and when administered with an enteric coating. Neutral solutions of PAS or the sodium salt may also be administered parenterally where indicated.[24]

Sometimes the drug is introduced directly into the tuberculous cavity in daily doses of 2 cc. of a 20 per cent solution. The same quantity and strength of solution is administered as an aerosol for bronchial lesions.[29] Sterile jellies of PAS are sometimes employed for treating the cavities, and ointments containing the drug are applied topically to tuberculous lesions.[30]

PAS is frequently administered as an aqueous solution alkalized with sodium bicarbonate and flavored to taste. The following suggested method comes well recommended:[6] Using a vessel sufficiently large to permit effervescence, add 60 Gm. of sodium bicarbonate and then 100 Gm. of PAS to sufficient water to make a total volume of 500 cc. Each 5 cc. of the resulting solution will contain 1.0 Gm. of the drug. Since there is rapid deterioration in such a solution, it should be kept refrigerated and discarded 48 hours after preparation.

Licorice[31] and oil of wintergreen[32] have been used as flavoring agents for such solutions. In the studies by Anderson and his coworkers,[27] no significant difference was observed in the incidence of side-effects among those taking the mixture with licorice flavoring as compared with those using wintergreen.

A sterile jelly for injection into tuberculous sinuses and cavities may be prepared as follows:[30]

| | |
|---|---|
| **Sodium PAS** | **20.0 Gm.** |
| **Tragacanth** | **0.4 Gm.** |
| **Sodium metabisulfite** | **0.1 Gm.** |
| **Glycerine** | **0.5 Gm.** |
| **Water, to make** | **100.0 Gm.** |

The tragancanth base is sterilized separately by autoclaving, the active agent by dry heat. The medicament is incorporated under aseptic conditions into the base and the jelly is then distributed aseptically into sterile tubes. When needed, the contents of a tube are expelled into the barrel of a hypodermic syringe and the piston inserted.

The same source provides the following formula for a PAS ointment that has remained stable for three months at room temperature:

| | |
|---|---|
| **Sodium para-aminosalicylate** | **10.0 Gm.** |
| **Absorption base (Eucerin, anhydrous)** | **60.0 Gm.** |
| **Sodium metabisulfite** | **0.1 Gm.** |
| **Water, to make** | **100.0 Gm.** |

The aqueous solution of salicylate and the metabisulfite, warmed to 65°C. is added to the absorption base at the same temperature. Triturate while cooling and put through an ointment mill.

A number of workers have discussed the beneficial effects resulting from the administration of para-aminosalicylic acid. Particularly indicative is the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description given by Bogen, Loomis and Will.[28] They state that the majority of patients who were given PAS reported a tonic effect or a general feeling of improvement while taking the drug. This was confirmed in about half the cases by a drop in temperature if fever was present, a lessening of cough and of volume of expectoration, and a thinning of the sputum. There was also an improvement in appetite and a gain in weight, and in a number of cases this was accompanied by a lessening of gastrointestinal symptoms previously ascribed to tuberculous enteritis. Several striking instances of improvement in laryngeal ulcers and other visible lesions were noted. They believe that it is too early to report radiologic changes or changes in the bacillary content of the sputum, although both have been seen in individual cases.

Phillips[13] has said that when PAS is administered a reduction in fever and sedimentation rate, a decrease in cough and expectoration, and a general subjective improvement are to be expected early. X-ray improvement follows later.

Clinical reports on the value of PAS have come from Sweden, Switzerland, England, Canada and the United States. From the accumulation of data it appears that the drug is useful in the treatment of various types of tuberculosis. For example, in the British *Lancet*, Nagley and Logg[33] have stated that the value of PAS in the exudative type of pulmonary tuberculosis is becoming established. In Switzerland, Seiler[29] reported that the drug and its sodium salt are being used extensively for chronic pulmonary tuberculosis with cavities and for tuberculosis of the bronchi, larynx, cervical nodes, urinary tract, and middle ear.

In an indicative American study, Sweany and his associates[34] found that PAS therapy had improved 70 per cent of their patients with acute exudative tuberculosis and has aided 48 per cent of those with chronic fibrocaseous ulcerative lesions. Nine patients were treated with PAS after failing to respond to streptomycin therapy. Two became worse with the drug, one remained unimproved but without deterioration of his condition, two were slightly improved but four patients were markedly improved.

According to Bogen and his associates, an important indication for treating some of their patients with para-aminosalicylic acid was a visible tuberculous lesion such as tuberculous laryngitis, trachobronchitis, draining sinus, tuberculosis adenitis or a fresh exudative pulmonary lesion. Following his success with the local application of the drug to accessible tuberculous ulcers, Salvi[35] expressed the opinion that the results warranted further trial of the method.

At present, according to the experts,[6] the principal indication for the use of para-aminosalicylic acid alone is in the treatment of patients in whom bacterial resistance to streptomycin has already occurred. By far the most effective use of PAS in other patients is in

(*Continued on page 748*)

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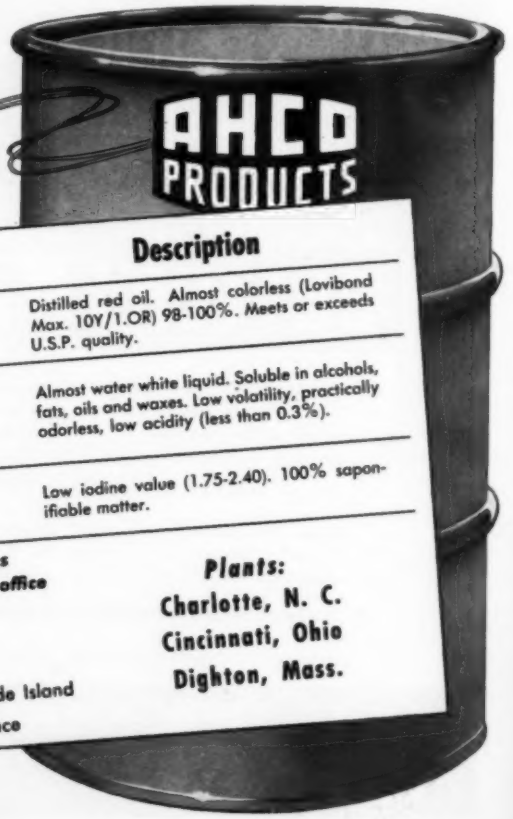


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# INDUSTRY'S BOOKS

*Condensed Review of Pharmacy*, by George W. Fiero, Phar.D., Ph.d., Manufacturing Department, Esso Standard Oil Co., Sixth Ed., 121 pp., John Wiley & Sons, Inc., New York, $3.

The object of this publication is to furnish a complete condensed compendium of the drugs, chemicals and preparations of the United States Pharmacopoeia, Thirteenth Revision, and the National Formulary, Eighth Edition. In this sixth edition, the material has been entirely rewritten to conform with the English Titles used in the U.S.P. and N.F.

*Inorganic Chemistry in Pharmacy*, by Lloyd M. Parks, Ph.D., Professor of Pharmaceutical Chemistry, University of Wisconsin, Paul J. Jannke, Ph.D., Associate Professor of Pharmaceutical Chemistry, University of Connecticut, Loyd E. Harris, Ph.D., Professor of Pharmacy, Ohio State University, with a chapter on Isotopes by John E. Christian, Ph.D., Co-ordinator of Bio-Nucleonic Research, School of Pharmacy, Purdue University, 298 pp., J. B. Lippincott Co., Phila., $6.

There is a general agreement, among those charged with the academic training and education of the pharmacist, on the necessity within the curriculum of a course which deals with inorganic chemistry in pharmacy. Such a course is described in the catalogs of various schools as inorganic pharmacy, inorganic pharmaceutical chemistry, the pharmacy of inorganic chemicals, or by a similar descriptive title. The most recent justification of the necessity, and place within the curriculum, of this course is furnished by the Consultive Committee on Physical Sciences and Mathematics in the Pharmacy Curriculum of The Pharmaceutical Survey and by the current Committee on Curriculum of the American Association of Colleges of Pharmacy. These committees recommend a course designed to supplement and augment the descriptive and, by its very nature, general information of the course in beginning chemistry to develop a more adequate basis for the proper handling of inorganic medicinal chemicals by the pharmacist. This present work has been written as a textbook for such type of information. It is intended for a course which follows, and presupposes a knowledge of, general chemistry and qualitative analysis, and may be described briefly as a review of certain principles of inorganic chemistry with special reference to the preparation, properties, testing and uses of inorganic chemicals employed in pharmacy and medicine.

*Antibiotics—A Survey of Penicillin, Streptomycin, and Other Antimicrobial Substances from Fungi, Actinomyceles, Bacteria, and Plants*, by H. W. Florey, E. Chain, N. G. Heatley, M. A. Jennings, A. G. Sanders, E. P. Abraham, M. E. Florey, Vols. I and Vols. II, Oxford University Press, New York, 1774 pp., $29.75 set.

Although there are comprehensive reviews of the literature on antibiotics and books concerned with penicillin and streptomycin, particularly with their use in the clinic, the present work pays special attention to historical foundations, and to accounts of the chemical, biological, and clinical aspects of recent investigations. An attempt has been made to present the main established facts about all the antibiotics which have been obtained in pure or fairly pure form at the time of going to press, to consider the general principles employed in their isolation, and to describe their chemical and biological properties in sufficient detail to enable those who are interested to secure more than superficial information without reference to the original literature. Substances whose existence has only been inferred from the observation of antibacterial activity, and those which have been extracted only in a crude form, have also been surveyed as completely as possible. Penicillin, in which the authors have been particularly interested, has been given extensive treatment which it is hoped will help chemists, bacteriologists, and clinicians to obtain a general understanding of the substance. Streptomycin has also been dealt with in some detail. Table of Contents: Volume I—Preface; Part One—Historical Introduction; Part Two—General Experimental Methods; Part Three—Antibiotics From Fungi; Part Four—Antibiotics From Fungi; Part Five—Antibiotics From Actinomycetes; Part Six—Antibiotics From Bacteria; Part Seven—Antimicrobial Substances From Lichens, Algae, and Seed Plants. Table of Contents:—Vol. II; Part Eight—Penicillin; Part Nine—Streptomycin; Part Ten—The Action of Antibiotics on Bacteria; Part Eleven—Conclusions; Appendix And Tables Of Antibiotics; Bibliography; Author Index; Subject Index. Note; A third volume, which will be published later, will be entitled "Clinical Applications of Antibiotics."

*Formulaire de Parfumerie et de Cosmetologie*, by R.-M. Gattefosse. Girardot & Cie., 27, Quai des Grands-Augustens, Paris (6), France, 1950, 367 pp., Price 1600 French francs.

The name of R.-M. Gattefosse is unique in modern perfumery. An indefatigable writer, he has dedicated a prolific pen to four decades of ceaseless chronicling, during which time he has investigated diverse facets of subjects relating to beauty and to fragrance. His latest book follows in the tradition of those he has written before: simple explanation, typical formulas, that may serve as a point of departure for the novice, that may suggest to the advanced, or may impart to those acquainted with some aspects of this art an introduction to others.

The greater part of the work deals with perfumery; less than 100 pages are devoted to creams, lipsticks, dentifrices, powders, nail and hair preparations.

Following some tables on solubility and other data for aromatics, the author plunges into formulations. He divides floral notes into "families," placing in the jasmin group, for example, lilac, muguet, cyclamen, and ylang, in addition to jasmin itself. Formulas are then offered, which are usually self-sufficient; however, on occasion, there are constituents called "jasmin artificiel" and "muguet artificiel," generalizations that are well-nigh meaningless, and in one instance making up 86.5 per cent of the perfume base.

Whatever may be the value of this work in France, it is doubtful if in America the section on cosmetics will prove to be as interesting as that on perfume. Many volumes, particularly those of de Navarre and Harry, offer more complete and, for this country, more up-to-date data.

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## New Drugs for Tuberculosis

(*Continued from page 745*)

combination with streptomycin. They report that administration of the chemical and the antibiotic as combined therapy for periods of from 90 to 120 days appears to be the drug treatment of choice in the acute and progressive forms of pulmonary tuberculosis, tuberculosis of the genitourinary tract, and in tuberculosis of the bones and joints.

Their authoritative report focuses attention on the view that, by reducing the incidence of streptomycin resistance or by delaying its appearance, combined therapy with streptomycin and PAS shows promise of significantly decreasing the sharp therapeutic limitations which exist when streptomycin alone is employed. In England, following trials in the therapy of acute pulmonary tuberculosis, it was stated[36] that the investigations had "demonstrated unequivocally" that the

combination of PAS with streptomycin reduced considerably the risk of development of streptomycin-resistant strains of tubercle bacilli during the six-month period following the start of treatment.

Experimental studies[37] indicate that the combination probably has a synergistic action. There is evidence[38,39] that the conjunct use of PAS and streptomycin produces an effect that is greater than that produced by either drug alone. Clinical results are also very indicative. Thus, in the Council report,[7] it is stated that results with PAS (12.0 Gm. perorally daily) and streptomycin or dihydrostreptomycin (both in daily doses of 1.0 Gm., intramuscularly) appear highly promising. It is noted that in the absence of para-aminosalicylic acid, resistant bacilli develop in 80 per cent of the patients. However, in 36 patients treated with PAS and streptomycin, and followed for four to twelve months, the incidence of resistant bacilli was only 30 per cent. Similarly, Anderson and Jansen and Wicks[37] reported that in 19 cases on combined therapy, the incidence of the emergence of "completely resistant" variants was found to be markedly delayed as compared with patients receiving streptomycin alone.

A variation in the use of the combined treatment, a form of intermittant therapy, is described by Paraf[28] in his report on the effects of PAS in cases of pulmonary or pleural tuberculosis. To prevent streptomycin resistance, he recommends a series of 30 daily injections of 1.0 Gm. of the antibiotic, alternating with a one-month

course of 25.0 Gm. of PAS daily, by mouth. Roentgenologic clearing occurred within 6 weeks to three months. There was a drop in the temperature, increase in body weight, return of appetite and conversion of sputum.

Also worth noting is the development by Hobby, Regna and Lenert[40] of the para-aminosalicylic acid salt of streptomycin. This is a highly purified compound consisting of 56 parts of streptomycin and 44 parts of PAS; one molecule of the pure antibiotic combining with three molecules of para-aminosalicylic acid. Preliminary studies of this salt indicate that it has a tuberculostatic action equivalent to about twice that of streptomycin alone. The available experimental data suggests that the salt has a much lower tendency to produce resistance than streptomycin alone. This salt permits the administration of streptomycin and PAS simultaneously in a single injection. Streptomycin para-aminosalicylate may be administered without difficulty and is non-irritating in animals upon repeated injection at the same site. Clinical studies with this salt are now being made.

The current situation with respect to the advantages of combined therapy have been summarized in the report[6] of the American Tradeau Society, as follows: (a) greater therapeutic effectiveness than can be obtained with either streptomycin or PAS alone, and (b) postponement of the emergence of streptomycin resistant strains of tubercle bacilli in treated patients. In view of the evidence it appears justified to conclude, says the report, that, in patients for whom drug therapy is indicated and whose organisms are not resistant to streptomycin, combined administration of streptomycin and PAS is usually the drug therapy of choice.

Of course other drugs, alone or in combination with streptomycin have been studied with respect to the possible utility as antituberculous agents. Among them are various sulfones, which are available under such names as Diasone, Promin and Promizole.[13] These derivatives of diaminodiphenylsulfone, says Kolmer,[10] have given more encouraging therapeutic results than the sulfonamides, but have fallen far short of original hopes and expectations. He reports that Promin and Diasone are not generally regarded as practical remedies in tuberculosis. Promizole, however, is much less toxic and is worthy of clinical trial in conjunction with streptomycin as a form of synergistic or additive chemotherapy.

As a matter of fact, Promizole has been given considerable study. Particularly noteworthy is the work by Lincoln and Kirmse[41] on the effects of this agent, with or without streptomycin, in the treatment of tuberculosis in children. Indicative is a recent report[42] describing the treatment of 13 cases of miliary tuberculosis and 21 cases of tuberculous meningitis with a combination of streptomycin and Promizole. Eleven of the patients with miliary tuberculosis and 16 cases of tuberculosis meningitis were still alive at the time of the report. In view of these results, they feel that, when it is properly administered, combined therapy


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of this kind seems to improve the results and is worthy of more extensive clinical trial.

In studies made by others,[7] the results with Primazol and streptomycin were equivocal. However, even though the findings were not promising, it was felt that perhaps a final opinion on the results should not be expressed.

Of more present interest is the work being done on the thiosemicarbazones, more particularly the compound referred to by the Council[7] as TB-1. Developed in Germany with the cooperation of the Nobelist, Gerhard Domagk,[43] the drug was originally designated by the code TbI/698, but is now called Conteben in that country. In the United States the proprietary names Tibione and Myvizone have been proposed for this product. Considerable information on this drug is already available and much of this data has been summarized in the report prepared by Hinshaw and McDermott[44], following their visit to Germany.

Chemically, TB-1 is 4-acetylaminobenzaldehyde thiosemicarbazone. It is a pale yellow, microcrystalline powder with a bitter taste. It is almost insoluble in water and only slightly soluble in organic solvents. However, solutions may be prepared in propylene glycol, formamide, methylacetimide, and in aqueous antipyrine. TB-1 may be administered intravenously or orally. The drug is said[45] to be available for clinical trial in tablets of 25 and 50 mg. On oral administration, it is rapidly absorbed from the gastrointestinal tract. From 10 to 15 per cent of the drug is excreted in the urine and it is believed that most of it is destroyed in the body.

At the beginning of clinical tests with TB-1, report Mertens and Bunge,[46] toxic effects were frequently produced because of ignorance of the most suitable dosage and the mode of action of the drug. However many of these side-effects can now be avoided. As noted by Hinshaw and McDermott,[44] the principal toxic symptoms observed with TB-1 therapy are anorexia, malaise and, occasionally, vomiting. All these symptoms usually subside with a reduction of dosage or an interruption of medication. Mild anemia, occasional skin rashes, conjunctivitis and mild albuminuria have also been observed. Since agranulocytosis has been a complicating factor in a few cases, it is recommended that blood counts be made at frequent intervals.

Hinshaw and McDermott note that TB-1 appears to have an anti-tuberculous activity of the same general order as para-aminosalicylic acid. From their study of a total of more than 2,000 cases treated with the thiosemicarbazone in ten German institutions they found that the drug appears to be far less effective in the treatment of miliary or meningeal tuberculosis than is streptomycin. Most impressive was the improvement of mucous membrane lesions and complications of pulmonary tuberculosis, such as tuberculous laryngitis and enteritis. Pulmonary lesions treated before irreversible pathological changes occur respond well to treatment. It is also said to be effective in tuberculous empyema where streptomycin and para-aminosalicylic acid have not been notably effective.

TB-1 may be used alone or in combination with agents like streptomycin, dihydrostreptomycin or PAS.[45] However, the experts[6] feel that further work must be done to determine whether the thiosemicarbazones will be most appropriate as primary agents or as an adjunct to other drugs in the treatment of tuberculosis. They do not believe that TB-1 should be employed generally in tuberculosis therapy until more information is available concerning its limitations and potentialities. That information is now being gathered.

Concurrently, other drugs are being investigated for their potential value as antituberculosis agents. There is the possibility, for example, that the antibiotic, neomycin will have a useful role in this field.[47] According to Waksman,[48] neomycin is similar to streptomycin in its anti-microbial properties, except for the added advantage that it is particularly active against those bacteria which have become streptomycin-resistant. Chemically, however, it is quite different from streptomycin.

Unfortunately, present information[6,47] indicates that neomycin, while active against tubercle bacilli *in vitro* and in animals, is as yet too toxic to be of value in the treatment of human tuberculosis. Unless the toxicity can be reduced, either by further purification or by chemical structural alteration, it is felt that neomycin cannot be recommended at present, even on an experimental basis.

*In vitro* studies, recently reported by Ballon and Guernon,[49] indicate that notation or penicillin B is highly inhibitory to the growth of the tubercle bacillus. Earlier, lupulon, an antibiotic obtained from hops,[50] had proved its ability to inhibit a strain of *Mycobacterium tuberculosis* in dilutions as high as 1:40,000 in *in vitro* tests. Animal studies also showed that lupulon exerted a strong effect on tuberculosis in various tissues and organs. The definite tuberculostatic action of this antibiotic is attributed[51] largely to its fat solubility, which enables it to be absorbed by the lipid fraction of the tubercle bacillus.

Usnic acid is another compound that is now under investigation[52] because of its possible value in the treatment of tuberculosis. Although Marshak and Kuschner,[53] found that streptomycin alone, in sufficiently large doses, is more efficient than usnic acid in arresting tuberculosis in animals, they also observed a synergistic action of the two drugs. This, they feel, makes it probable that the development of resistance to streptomycin may be limited through the combined action of both substances.

In Washington, at the April, 1950 meeting of the National Tuberculosis Association, McDermott and Tompsett discussed a very new antibiotic that may be of value. Called viomycin, it appears to be capable of appreciably suppressing the course of the tuberculous infection. Viomycin also appears to be active against tuberculosis organisms that have become resistant to streptomycin. Viomycin has been tested on a small number of patients. Although it is somewhat toxic, the preliminary studies indicate that the agent can be


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Vacation time is on us before you can say, "Mayor O'Dwyer." And in New York City, the Mayor is a greater symbol of vacations than suntan lotions.

•

While the rest of us figure out where to go, the politicians again have the advantage. Their constituents tell them.

•

The seashore is played out as a lure to many who harked to the roaring surf with a swab in one hand and a bucket in the other. Mountains are no longer interesting to others because every time we went on maneuvers somebody put an Alp in the way.

•

It's tempting to stay home for a couple of weeks but there's always the danger that the guy across the way has the same idea. He's not exactly a bore but stimulates yawns that are more conducive to lockjaw than tetanus.

•

He's the only bridge player who ever doubled a "pass," surpassed only by his charming wife, who redoubled it. Once, in describing her reactions to the Kinsey Report, Mrs. Bore said:
"The movie version should be better."

•

Professional politicians don't worry about their vacations. The conventional vacation time means Primary Time to them. That's the period when they give the voters a free choice of two nobodies, to be sure they won't have to disturb their chronic vacations during the rest of the year.

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used for prolonged periods. Further studies are being made to fully evaluate the antibiotic.

Despite the growing importance of chemotherapy in the treatment of tuberculosis, authorities[6] in the field believe that, in general, it is desirable to withhold drug therapy if other satisfactory therapy for a tuberculous condition is available. They look with disfavor on the practice of utilizing drug therapy prior to institutional care or as an alternative to adequate bed rest, collapse therapy or other surgical intervention, in the hope that such procedures may be avoided. Furthermore, as pointed out by Hinshaw,[54] the mechanical defects which are produced in different structures by the destructive action of tuberculosis will create special clinical and surgical problems which cannot be met completely with any antibacterial agent, regardless of its efficacy.

Of course, this does not obviate the fact that the use of these agents has already done much to improve the all-over picture of antituberculosis therapy. They are often very beneficial, especially with respect to alleviation of symptoms and speeding of healing. Often their use makes surgery possible in what might otherwise be a hopeless case.

**BIBLIOGRAPHY**

22. Symposium: Am. Rev. Tubere. 58:479, 1948.
23. Allison, S. T., Volk, R. & Vitagliano, G. R.: New England J. Med. 241:52 1949.
24. Lehmann, J.: Lancet 1:15, 1946.
25. Bogen, E., Loomis, R. N. & Will, D. W.: Am. Rev. Tubere. 61:226, 1950
26. Delaude, A., et al: Proc. Staff Meet. Mayo Clinic 24:341, 1949.
27. Anderson, W., Jansen, M. G. W. & Wicks, C. A.: Canadian M. A. J. 62:231, 1950.
28. Paraf, J.: Prog. Med. 77:432, 1949.
29. Seiler, M.: Tubercle 30:45, Feb. 1949.
30. Oberweger, K. H.: Pharm. J. 163:36, 1949.
31. Hemming, M. & Stewart, C. J.: Lancet 1:174, 1949.
32. Anon.: Am. Prof. Pharm. 16:39, 1950.
33. Nagley, M. M. & Logg, M. H.: Lancet 1:913, 1949.
34. Sweany, H. C.: Des. of the Chest 16:633, 1949.
35. Salvi, A. E. K.: Tubercle 30:223, 1949.
36. Anon.: Brit. Med. J. 2:1521, 1949.
37. Youmans, G. et al: J. Bact. 54:409, 1947.
38. Bloch, R. S. et al: Am. Rev. Tubere. 59:554, 1949.
39. Vennessland, K., Ebert, R. A. & Bloch, R. G.: Proc. Soc. Exper. Biol. & Med. 68:250, 1948.
40. Hobby, G., Regna, P. & Lenert, T.: Am. Rev. Tubere. 60:808, 1949.
41. Lincoln, E. M. & Kirmse, T. W.: Pediat. 5:280, 1950; Lancet 1:767, 1949.
42. Lincoln, E. M. & Kirmse, T. W.: Am. Rev. Tubere. 61:159, 1950.
43. Domagk, G.: Am. Rev. Tubere. 61:8, 1950.
44. Hinshaw, H. C. & McDermott, W.: Am. Rev. Tubere. 61:145, 1950.
45. Anon.: J. Am. Soc. Hosp. Pharm. 6:276, 1949.
46. Mertens, A. & Bunge, R.: Am. Rev. Tubere. 61:20, 1950.
47. Holland, M. O.: Pharm. Internat. 4:11, April, 1950.
48. Waksman, S. A.: Pharm. Internat. 3:20, Oct. 1949.
49. Ballon, H. C. & Guernon, A.: Canadian M. A. J. 62:277, 1950.
50. Editorial: J. A. M. A. 140:1218, 1949.
51. Chin, Y. C. et al: Proc. Soc. Exper. Biol. & Med. 70:158, 1949.
52. Marshak, W. B., Schaeffer, W. B. & Rajagopalan, S.: Proc. Soc. Exper. Biol. & Med. 70:565, 1949.
53. Marshak, A. & Kuschner, M.: Public Health Repts. 65:131, 1950.
54. Hinshaw, H. C.: J. Lancet 67:131, 1947.

## The Talking Package

(*Continued from page 661*)

The carton of a cream jar is doing only half of its selling job on the counter if it is constructed of board that does not stand up, or if its surface does not properly resist soil. The cleansing cream package should convey an atmosphere of pristine freshness. That is its great appeal.

If I were designing a toilet soap package:

I would never lose sight of the fact that the primary function of a cake of soap is to wash the body. Whether dressed up in an elaborate production to entice the gift-buying public, or dressed down in the drabbest manner, soap is meant for one thing. Its mission in life should therefore be respected. It should invite use.

Its lines should be clean, and its decoration sharply etched in contrast to the smooth planes surrounding it. The unmarred, uncluttered surface of a well-made cake of soap is most attractive, most revealing of its quality. This does not mean that it must be plain, but rather that its embellishment be suitable, in good taste, and suggestive of use. Sometimes a soapcake is so elaborately contrived that one hates to be the first user. Several months ago I gave such a cake of soap to a friend who was spending a week-end in a New York hotel. She thanked me for it, but said, "It is so beautiful that I cannot bear to use it," and I find she has not used it yet. She buys fine soaps, and might have become an enthusiastic new customer by this time, had the design of the cake been less forbidding, more like soap than an object d'art. It goes without saying that the form of the soap should be sympathetic to the hand when both are wet. The size is important, especially in bath soap, which is often too clumsy for a woman's hand, as well as too large for the bathroom fixture.

If the soap is to have color, it should be most carefully chosen. If the soap is an item in a line, its color may blend with the packages or contract harmoniously with them, but above all, the color chosen for the soap itself should be clean and attractive. A raw shade will only succeed in making the soap look cheap, and will be an annoyance when the customer finds that it clashes with her bathroom decoration.

If the soap is unwrapped, of course great care must be taken with its boxing in order to keep it unmarred. The divisions between the cakes should be firm, not sloppy, the cover of the box snug, and there should be protection of some kind between the soap and the cover. As it is, there will be movement enough when the soap shrinks, since the original sample of the box has to take its dimensions from fresh soap.

The box design adapts itself to the line of which it may be a part, or if it is on its own, it creates its individuality according to its maker's desires, translated to the public by the designer.

We should remember that when a woman buys soap in a box of three cakes for a dollar or more, instead of in bulk from the grocer, she is expecting something fine. She will not be favorably impressed if the product is banged up, faded, pulverized or spotty,—or if the box is dirty and its protecting pad missing. All too often one sees soap that has been mistreated in the store before it has had the opportunity of telling its story to the consumer. Would it not be worth while to find some way of including in the package a message to the salesperson as to its proper handling?

If I were designing a package for fine perfume:

I would remember that the average woman thinks of perfume as a precious commodity. I would endeavor to make every detail of the package as fine as possible in quality and appearance, so that the very unwrapping by the customer would be a build-up for the product within. There is something unusual about unwrapping a perfume package. It is a special pleasure, rather like undoing a new hat or frock about which one feels slightly

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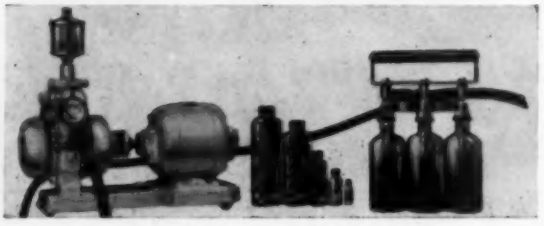

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guilty and very eager. The fact that the outside covering of the package is sealed gives an important feeling that no other hands have touched it since it left its birthplace. When it is being opened, each successive detail makes an impression. The whiteness of the protecting board and the quality of the tissue are noticed. The careful precision with which the whole thing is put together imparts an air of authority. It appears precious and one can scarcely wait to get to the perfume itself.

When the box is reached, it speaks of the perfume's atmosphere. If the woman has purchased the perfume herself, it is an indication that she has responded in some measure to the idea of the fragrance which is being projected by the advertising and publicity. However, as soon as she begins to wear the fragrance it becomes the reflection of her own mood, her own taste, and carries with it her personal associations. Therefore, the decoration on the box should not be so bold that it fights the customer's conception of the perfume. It should be a subtle, restrained expression of the perfume's theme. The box should be constructed so that, whether the bottle stands or lies flat, it serves as a flattering frame. Furthermore, the color of whatever material surrounds the glass must be chosen with utmost care. Otherwise the beauty of the liquid (if a clear bottle is used) will be hidden, and consequently a natural asset of the perfume thrown away.

The form of the bottle is of paramount importance, because more so than the box it is destined to live with the perfume and to become its very symbol. It should possess a timeless quality. Whatever its shape, its lines must be elegant and true. Otherwise the eye grows weary of them, and after awhile they appear dated. The bottle should feel comfortable in the hand. It should be steady on its base. If it is tippy it will not remain on the dressing-table or even on the bathroom shelf, for no woman wants her furniture marred or the expensive perfume wasted. It may prove difficult to achieve the shape necessary to the perfume's theme without an unsteadiness of the base. In this case, it could be set into a permanent base which should be designed when the bottle is designed. In this way the base will appear with the bottle to be a harmonious unit and not an after-thought or remedy. The glass should be flawless. It should dramatize the beauty of the liquid as a setting enhances the beauty of a diamond.

The bottle stopper may be a dramatic feature of the package or it may remain a simple complement to the bottle, but it must, of course, be correct in its feeling and lines. Above all, it must be easy to grasp; easy to remove from the bottle. Almost every woman has had the experience of not being able to get at a delectable bottle of perfume just when she most wants to use it. She has all the fun of opening it and finally arrives at the treasure itself, all agog to try it. What happens? She cannot undo all that tightly wound cord about the neck. She tries the scissors and she may have to get a knife. Then the stopper will not budge. She cannot remember whether to put it under the hot or the cold water so she tries both. Neither works. She tries tap-

ping it. Her husband taps it, and it is broken. Since ground glass stoppers are a problem, and when they do not work an annoyance, especially on an expensive item, might it not be feasible to tell the consumer how to deal with such an emergency?

The average woman is fond of perfume. She likes having it out in the open, easily accessible, ready to use. She is proud of her perfume possessions, and on the whole quite package-conscious about all her cosmetics.

The designer needs to understand the consumer's reactions in order to plan the packages she will enjoy, use and buy again. He needs to understand his client's aims, his products and the individuality of his firm. Only then can he interpret them in packages that will say the proper things—and sell.

---

## Distribution of New Products

*(Continued from page 663)*

on fast moving items; that the wholesaler receive prompt notification of new product releases.

Now we turn to the retailer, and in answer to the question:

"Has your business been improved, little affected or harmed by the introduction of new pharmaceuticals?"

The majority opinion given was overwhelmingly in favor of "improved"—although, several retailers believed their businesses had been harmed, and that there was far too much duplication of new products, particularly new products that had no advantage over other existing products on the market.

Others stated that volume had unquestionably increased because of new products, but because of high inventory levels, profits and decreased.

In answer to the question,

"Who should have the first information on a new product—the physician or the trade?"

By far the largest number believed that the trade should get the first information. Some stated that the release should be simultaneous and a few suggested that the physician should be informed with a quick follow-up to the trade.

"What quantity of a new tablet do you prefer to stock initially?"

A bottle of 100, if this were the available size, was majority opinion. A small minority stated the smallest available, some said 1/12 of a dozen, others, that it depended upon the product.

"What quantity of a new injectable in ampuls or vials?"

Most stated that 1 vial or 1 x 6 ampuls would be their choice. To some extent this was influenced, of course, by the size of the store, many of the larger stores reporting that they wanted 2 or 3 vials in stock initially. Again, the type of product would be a factor.

"What quantity of a new liquid?"

If the product were available in 4 oz., pints and gallons, opinion was equally divided between 4 oz. and pints. Here again, size of store was a factor, the larger prescription stores requesting the pint size.


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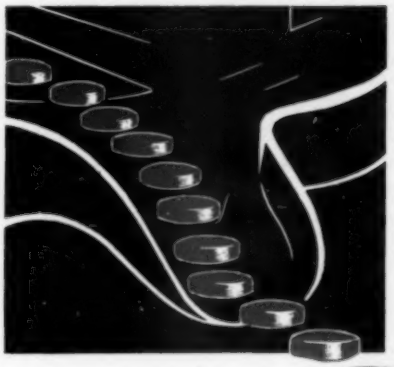

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Price of course was also mentioned as a factor in regard to tablet, injectable or liquid product size.

"On the average, how much would you be willing to invest for the first shipment of a new product?"

As you can see, many of these questions are of necessity somewhat ambiguous and the answers would be influenced to some extent by a great many variables. However, these were taken into consideration as much as possible, and the results screened in order to bring to you information which we believe pertinent and interesting.

In answer to this question, we had a range of from $1.00 to $50.00, some retailers stating that they would not be willing to invest more than $1.00, others would go up to $50.00, depending, of course, on the product and the unit price. An average for the group was from $5.00 to $10.00. Some stated, as you might expect that price was no consideration if a ready market existed for the product.

"Do you approve of automatic unrequested shipments?"

Five to 1 was the ratio in favor of automatic unrequested shipments. Among the comments, several retailers mentioned that it depended upon the manufacturer of the product. Some, a minority, stated that they would accept them on the basis of a guaranteed sale only.

"Do you accept unrequested shipments from manufacturers from whom you do not purchase directly?"

Here the ratio was 5 to 1 in the negative column. In other words, they would not accept unrequested shipments if they did not purchase directly from the manufacturer, which again leads into the next question,

"If you do accept unrequested shipments, what factors determine if you do accept or return the shipment?"

Most influencing factor was the manufacturer himself, his reputation, prestige, past performance insofar as new products were concerned, etc. A close second was the promotional support which would be given to a product and another important consideration was the size of the shipment.

"Do you believe manufacturers should do all the necessary promotion to the physician?"

Although the majority answered in the affirmative, many retailers believed that they should follow through on an additional program, as soon as the product had been firmly established.

Next question:

"*Do* you inform your physicians of new products?"

Here the answer was overwhelmingly YES. But included in the comments were these:

"Only if the company furnishes the material;" and,

"WE have no organized program."

"If you *do* inform the physician, what type of promotion do you use?"

Most retailers reported that they relied upon personal contact with the physician. Next were direct mailings to the physician, followed by dealer aids, and manufacturers' literature.

Some reported a store publication, or physician letter sent regularly upon the introduction of new products. Others stated that a special shelf was maintained where all new products were kept, and the physician's attention was called to the shelf where he could examine new products on his own initiative.

"What information on a new product (exclusive of new product name, price and packaging) do you find helpful?"

Indications for use led all other categories, closely followed by dosage; then contraindications, and still further down the line were clinical reports and pharmacology.

An interesting comment on several questionnaires was that the retailer wanted as much therapeutic information as possible but stated in a manner which was simple and could be readily assimilated and relayed to the physician by telephone when he called.

"How do you as a retailer want information on a new product, from the manufacturer? In the form of an index card, a supplement to your catalog, standard 8½ x 11 sheets, or in any other form?"

Catalog supplement led the list, closely followed by index cards, with the 8½ x 11 sheet a poor third, and several retailers mentioned that they wanted only the standard folders used in direct mail.

"What do you as a retailer dislike in the present methods of introducing new products?"

Most retailers said duplication of products or "me-too" items. Some stated that they are embarrassed by having the physician call them concerning new products when they have no literature or information available. Many retailers suggested that some manufacturers need a new set of crystal balls to determine sales estimates, because the supply and demand ratio was certainly not well correlated.

And, of course, we had to restate the last question to give the retailer an opportunity to give his suggestions for improvement over present methods of introducing new products. Here again, the question of product duplication led the field.

Other suggestions,

"Give us advance notice on a new product before the physician receives it;"

"Get the supply in proportion to the demand."

That completes the questionnaire. The entire problem of getting distribution for a new product is one that entails the utmost in cooperation with every link in the chain of distribution. The manufacturer, wholesaler, retailer, Professional Service Representative all must contribute.

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## The Antibiotic Vista

*(Continued from page 653)*

In the treatment of tuberculosis particularly, two serious problems have arisen—the rapidity with which susceptible organisms develop resistance and the appearance of certain side reactions. There is, however, little or no evidence that resistance takes place in clinical practice

when penicillin, chloromycetin, aureomycin or terramycin are used. Studies involving the tubercle bacilli are being advanced by the introduction of newer antibiotics, such as neomycin, mycomycin and viomycin, another recent discovery of the Pfizer laboratories.

These problems plus the numerous infections for which there are still no available chemotherapeutic agents stimulate the search for new antibiotics. The study of new antibiotics is now fairly well standardized. Hundreds of thousands of soil samples are being screened constantly for the isolation of organisms that produce some degree of antibacterial action against a variety of disease-producing microbes. This screening technique is being extended with the object of *finding* new antimicrobial agents. The entire antibiotic industry is spending millions of dollars in order to add to the medical armamentarium. It is our goal to have the best drug available for a particular infectious disease. One may be asked, why not search for an antibiotic which will be effective in all diseases thus greatly simplifying chemotherapy? The prospects for finding such an agent, however, are slim, since in order for this hypothetical drug to be effective against the entire range of pathogenic organisms, it would have to interfere with many biochemical processes at a level common to all living cells. In view of this, the imaginary all-purpose antibiotic might be expected to exhibit toxicity to the host as well as to the pathogenic microbe.

The role of antibiotics is not at all limited to the direct treatment of infectious diseases. The U. S. Department of Agriculture Laboratories have recently been experimenting with antibiotics in the food preservative industry. The addition of antibiotics (especially subtilin and lupulon) may serve to lower the cost and make many canned foods more appetizing. The use of antibiotics in this way will permit sterilization of food in cans at a much lower temperature without pressure cooking equipment and with preservation of vitamin content and improvement in flavor. Other fields of antibiotic application may be gleaned from its increasing use in veterinary medicine, and, experimentally, in dentistry as, for example, by the addition of antibiotics to dentifrices in order to reduce the incidence of tooth decay.

Antibiotic research in the future could lead to many diverse and unexpected paths, since discoveries are sometimes made by chance. A conspicuous illustration of this kind of discovery originated with the detection of vitamin B-12 culture in filtrates of such antibiotics as streptomycin, aureomycin and terramycin. It has now been established that one of the factors in the animal protein factor which promotes the growth of chicks, turkeys, swine, etc., is vitamin B-12, the vitamin which produces a remission in patients suffering from pernicious anemia. As little as four pounds of fermentation product when added to a ton of animal feed will increase the growth of chickens, turkeys and swine by about 50 per cent. Perhaps even more amazing has been the experimental observation that several antibiotics, penicillin, streptomycin, aureomycin and terramy-


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cin, can act as powerful growth stimulants over and above that produced by vitamin B-12 alone. Thus, these investigations have opened antibiotics to the field of nutrition and this, in turn, has provoked new avenues of research regarding the relationships of antibiotics to vitamins. It is not too much to hope that these investigations may help to solve many of the nutritional problems in our own and in foreign countries—a real challenge for the future.

But, at the present time, far more emphasis is being put upon the application of antibiotics to medicine. In some countries, plans are being laid for the use of antibiotics in eradicating venereal diseases on a mass scale. The relative need for antibiotics abroad, in comparison with the U. S., may be seen from a single example. The pneumonia death rate for New York City during recent years has been about 100 per 100,000 of those who contract the disease. On the other hand, mortality rates of 300 to 500 per 100,000 are relatively common in many foreign cities.

The impact of an aging population, the increasing importance of the degenerative diseases, and the effect of better medicines, newer drugs and therapies on the older people have resulted in the fact that 65 per cent of the deaths today are from the degenerative diseases.

However, let us concentrate our attention on cancer and the infectious diseases. These diseases have been divided into the six groups below according to their estimated relative significance.

| *Group I* | *Group II* | *Group III* |
|---|---|---|
| Cancer | Respiratory Tuberculosis | Nephritis |
| Pneumonis | Syphilis | Polio |
| Diarrhea & Enteritis | Whooping Cough | Scarlet Fever |
| | General Respiratory Infections | Influenza |

| *Group IV* | *Group V* | *Group VI* |
|---|---|---|
| Measles | Meningitis | Conjunctivitis |
| Chickenpox | Typhoid & Paratyphoid | Undulant Fever |
| Mumps | Furuncles, Ulcers and Skin Abcesses | Rheumatic Fever |
| Malaria | Sinusitis | |
| Diphtheria | Infections of Teeth and Gums | |
| Throat Infections | | |

We can now make an appraisal of the general value of antibiotics in the treatment of these diseases.

*Group I:*

*Cancer*—Despite the best efforts of American research scientists, we have not as yet found any cure for cancer. Indeed, the cause of this "scourge of mankind" has not yet been satisfactorily explained and thus it is hard to determine whether the best line of approach lies through a hormone-like substance, a chemotherapeutic agent or an antibiotic.

Further, one can speculate with some degree of certainty that the experience in fermentation chemistry which has led to the new antibiotics can be used in the search for an antitumor agent. Such a substance, showing some toxicity, was obtained from a recently

isolated microorganism and was found to inhibit the growth of Sarcoma 180 in mice according to a recent announcement of the Sloan-Kettering Institute.

*Pneumonia*—Penicillin and the newer antibiotics, including terramycin, are particularly effective in the treatment of pneumonia. The greater portion of the drop in mortality from 34.0 per 100,000 in 1941 to 18.2 per 100,000 in 1949 may be attributed to antibiotics. An even more significant decline in mortality is anticipated in 1950.

*Diarrhea and Enteritis*—This is still largely a field for the future. Some of the newer antibiotics, including terramycin, have evidenced some effectiveness in these indications; however, the subject requires a considerable amount of additional clinical work before the exact merits of these products are known.

*Group II:*

*Pulmonary Tuberculosis*—While mortality has been reduced from 37.1 per 100,000 in 1941 to 22.0 per 100,000 in 1949, progress in this field generally is not considered satisfactory, despite the development of streptomycin, dihydro-streptomycin and the recent adjunctive use of para-aminosalicylic acid. As I have indicated, neomycin, mycomycin and viomycin may offer new hope against this disease.

*Syphilis*—Since the advent of the antibiotics, mortality from syphilis has been nearly halved. If existing antibiotics are fully utilized, experts believe that syphilis can be virtually eliminated in this country in about 5 years.

*Whooping Cough*—Mortality on whooping cough has already been reduced over 50 per cent since 1941. However, most of the improvement up through the middle of 1949 is probably due to better management of the disease rather than antibiotics. We now find that terramycin, aureomycin and chloromycetin do an excellent job in controlling the disease. Consequently, by the end of 1950 or 1951, at least, whooping cough should be a Group V or even VI disease.

*General Respiratory Infections*—While we definitely have not solved the problem of the "common cold," antibiotics by indirection are doing a fair to good job in preventing respiratory complications.

*Group III:*

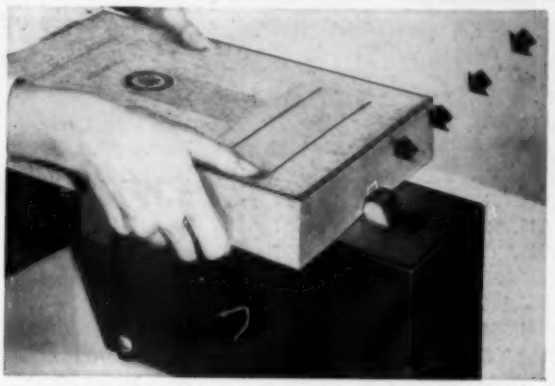
*Nephritis (Bright's Disease)*—Unfortunately, I can report only very limited progress with antibiotics in the treatment of nephritis.

*Poliomyelitis*—Antibiotics similarly have made no advance in the treatment of infantile paralysis. This is another field of the future.

*Scarlet Fever*—By shortening the duration of scarlet fever and reducing complications, antibiotics have played an important role in the 75 per cent reduction of mortality from scarlet fever since 1941.

*Influenza*—Some of the newer antibiotics may have some direct effect on influenza, however, the present evidence is inconclusive. Unquestionably, antibiotics have considerable indirect value in preventing pulmonary complications.

*(Continued on page 764)*

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## Patent Thoughts and Trends

(*Continued from page 721*)

| *Patent No.* | *Patent Issue Date* | *Inventor* | *Title* |
|---|---|---|---|
| 1,630,763 | May 31, 1927 | Paul H. Raymer | Chewing Gum. |
| 1,633,336 | June 21, 1927 | Winford P. Larson | Dentifrice. |
| 1,643,618 | Sept. 27, 1927 | Walther Bruck | Dentifrice Compound. |
| 1,645,791 | Oct. 18, 1927 | Roy H. Brownlee | Dentifrice. |
| 1,645,792 | Oct. 18, 1927 | Roy H. Brownlee | Dentifrice. |
| 1,645,793 | Oct. 18, 1927 | Roy H. Brownlee | Dentifrice. |
| 1,645,852 | Oct. 18, 1927 | Roy H. Brownlee | Dentifrice. |
| 1,664,182 | Mar. 27, 1928 | Maurice Parisi | Dental Powder. |
| 1,691,504 | Nov. 13, 1928 | Clarence C. Vogt | Mucin-Solvent Tooth Paste. |
| 1,716,035 | June 4, 1929 | Mendel Donchi | Tooth Paste. |
| 1,717,723 | June 18, 1929 | John Oppie McCall | Means For and Method of Detecting and Correcting Mouth Acidity. |
| 1,760,773 | May 27, 1930 | Clarence J. Penney | Container or Tube for Dentifrice. |
| 1,817,664 | Aug. 4, 1931 | Bernard B. Badanes | Dentifrice. |
| 1,861,189 | May 31, 1932 | Richard Pasternack | Dentifrice. |
| 1,863,116 | June 14, 1932 | George H. Heymann | Tooth Paste. |
| 1,869,406 | Aug. 2, 1932 | Friedrich Braunlich | Preparation of New Mouth Washes and Dentifrices. |

### B. *UNEXPIRED U. S. PATENTS*

*U. S. 1,916,403*, issued July 4, 1933 to Frederick C. Atkinson, assigned to John G. Praed.

Dentifrices which contain natural essential oils of citrus fruits develop rancid odor and flavor in contact with calcium or magnesium salts. The trouble is said to be with the terpenes which are present in the natural essential oils of the citrus fruits.

Claim 1, which is typical, gives the solution of the problem as well as an idea of the coverage:

A dentifrice comprising a paste including a polishing agent which normally reacts with terpenes, a natural oil of citrus fruit, and a binder, the natural terpenes having been substantially eliminated from the oil.

*U. S. 1,933,977*, issued to John J. Harris, November 7, 1933.


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Highly colloidal clays of the type of bentonite are said to be highly effective in cleansing the surfaces of the teeth.

Claim 2 indicates the coverage:

A dentifrice preparation in paste form consisting substantially entirely of from 3 to 6 parts of water, 1 part of bentonite and 2 to 15 per cent of fatty oil.

*U. S. 1,943,467*, issued Jan. 16, 1934 to Rudolph S. Bley.

Reduced reaction products of aliphatic and aromatic acids with monohydric, dihydric and trihydric phenols are said to exert a powerful germicidal action and to be harmless to tissues even in concentrated form when incorporated into dentifrices. An example of such a reduced reaction product is n-hexyl-m-dihydroxybenzene.

Claim 1 follows:

An antiseptic dentifrice, which does not deleteriously affect animal tissue comprising final reaction products of organic acids with hydroxybenzenes and an enzyme in active state.

*U. S. 1,943,856*, issued Jan. 16, 1934 to Roy Cross, assigned to Silica Products Co.

Magnesium oxide is used in connection with bentonite in dental preparations. Of some interest is the fact that sodium fluoride is also suggested as an ingredient in order to prevent decay.

Claim 1 follows:

A dental cream comprising bentonite, magnesium oxide, sodium fluoride, camphor and benzoin.

*U. S. 1,947,635*, issued Feb. 20, 1934 to Einar Bergve.

In order to obtain an acid tooth paste of satisfactory durability and uniformity it is suggested that the colloid-grinding be conducted at an increased temperature not higher than 70°C, preferably 60°C, so as to transfer the gel to a sol.

Claim 1 is typical:

Process of manufacturing an acid tooth paste, consisting in preparing a paste mass containing silica-water-glycerine-gel and an acid constituent, adding thereto substances rendering the colloids liquid at an increased grinding temperature without preventing the mass from coagulating again upon cooling, the mixture so prepared being peptizated by subjecting it to a colloid-grinding at an increased temperature not higher than 70°C.

*U. S. 1,968,858*, issued Aug. 7, 1934 to Washington Kyle Sheffield and Charles H. Dickson, Assigned to Worcester Salt Co.

The idea of this patent is to overcome the disadvantages of saline dentifrices of the powders and liquids type which are said to be wasteful, messy and non-uniform.

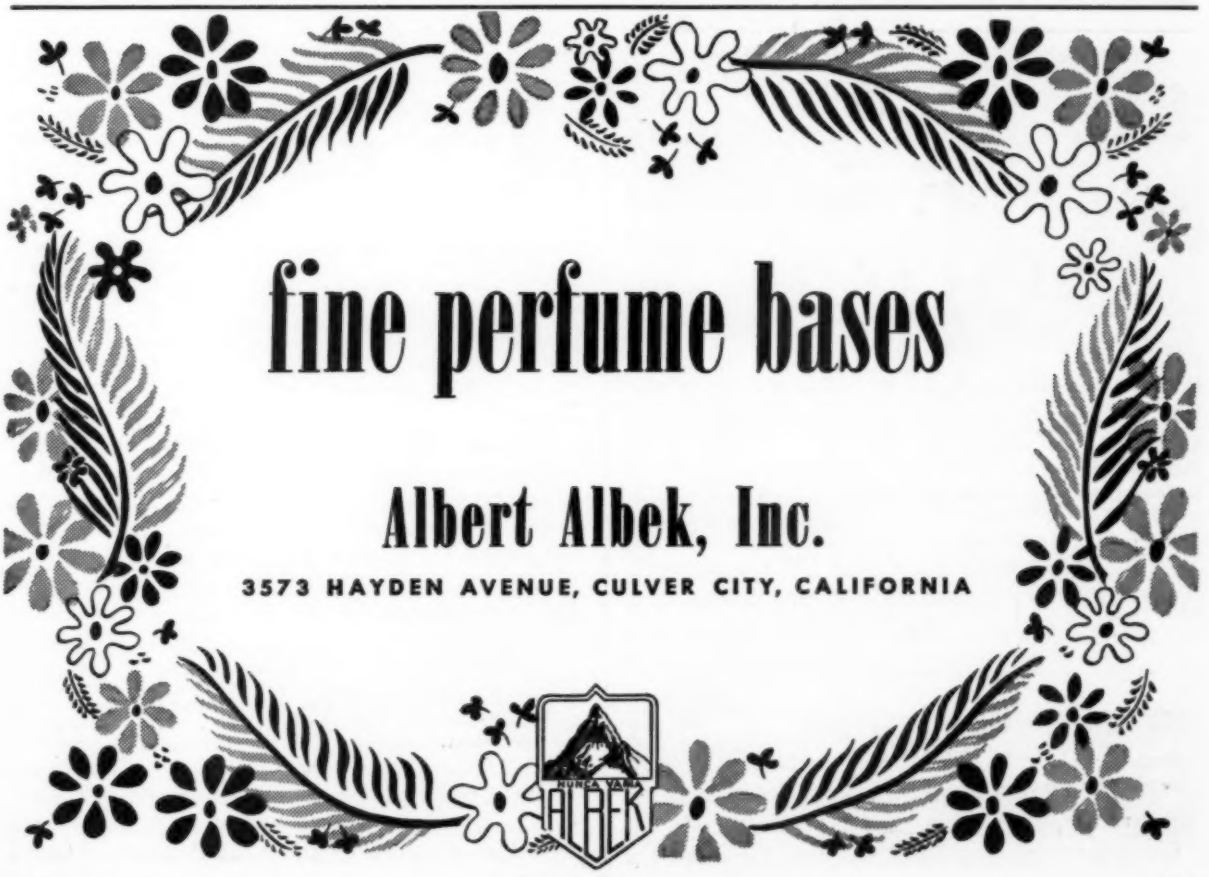
Claim 1 indicates the solution as well as coverage:

A sodium chloride tooth paste of uniform paste-like consistency, consisting of a plastic body mass having colloidal means for binding any water present to render the same inactive as a solvent for sodium chloride, and sodium chloride in substantially undissolved and solid state uniformly dispersed in said body mass and in concentration to be therapeutically effective, the body mass being stable and free of separation of ingredients and maintaining said sodium chloride in solid state.

*U. S. 1,969,340*, issued Aug. 7, 1934 to Clarence C. Vogt.

In order to dissolve the mucin adhering to the teeth aqueous solutions of organic compounds which are not only capable of producing an alkalinity of about pH 9 or more but also have the effect of reducing the surface tension of the solution materially are suggested.

Claim 10 is typical:

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*U. S. 2,010,910,* issued to Aug. 13, 1935 to Malcolm W. Atkins.

Bayer process alumina is proposed as a substitute for pumice in dental preparations, and is covered rather broadly as indicated by Claim 1:

A dental compound, containing as a cleaning and polishing agent Bayer process alumina.

*U. S. 2,018,410,* issued Oct. 22, 1935 to Guy A. McDonald and Dariel Miller, assigned to Victor Chemical Works.

Hydrated di-calcium phosphate stabilized against the production of grit or lumping for indefinite periods is obtained by freeing the dicalcium phosphate substantially completely from monocalcium phosphate, and by the addition of a stabilizing agent (trimagnesium phosphate) in small amounts.

Claim 1 is typical:

An abrasive composition comprising comminuted dicalcium phosphate dihydrate and a small proportion of a stabilizing agent, of the class consisting of magnesium phosphates, magnesium stearate and magnesium sulfate.

*U. S. 2,019,142,* issued Oct. 29, 1935 to Rudolph A. Kuever, assigned to The Pepsodent Co.

The only claim in this case indicates the idea of the patent:

A dentifrice composition containing insoluble sodium metaphosphate reduced to fine particles so as to act as a polishing and cleansing agent.

*U. S. 2,024,146,* issued to Herl L. Crowther, Dec. 17, 1935.

In order to prevent the decay of teeth resulting from acid in the mouth Crowther proposes the use of a protective coating of acid-resisting wax and suggests the incorporation of such a wax in dentifrices. Ceresine is said to be the best wax for the purpose.

Claim 1 is typical:

In a dentifrice the combination of: a body of dry powdered material suitable for introduction into the mouth without injury to the mouth membranes; and a sufficient quantity of wax impregnating the particles of said material and leaving said material in dry powdered form, to form a thin protective coating of wax on the exposed surfaces of the teeth, when said teeth are brushed regularly with said dentifrice in the ordinary manner.

*U. S. 2,025,655,* issued Dec. 24, 1935 to Benjamin Rice Faunce.

The inventor asserts that a medicinal product consisting of the proper combination (preferably 50-50) of animal bile and glycerine is obtained and is capable of acting as a prophylactic pus solvent, anti-congestive, or analgesic. Among other uses this product is said to be suitable as a dentifrice when combined with other suitable ingredients.

Claim 8 indicates the coverage as regards dentifrices:

A dentifrice paste comprising a bacterially filtered glyceride of bile wherein the glycerine and bile are of substantially equal proportions, a massing agent of glycerine in substantially three times the amount of the glyceride of bile, and a cleansing and polishing agent.

*U. S. 2,027,374,* issued Jan. 14, 1936 to Ora S. Fowler.

Fowler tackles the problem of providing mouth treating compositions intended to fight tooth decay by a novel idea of introducing to the mouth living organisms

which when introduced into the mouth convert an acid condition to one of alkalinity and which will remain alive in the mouth and multiply, thus continuing this state of alkalinity for an indefinite period. The bacterium known as Bacillus alcaligenes is favored, and all mouth preparations containing these delightful creatures are covered by the claims.

*U. S. 2,027,535*, issued Jan. 14, 1936 to Bernard H. Jacobson, assigned to Klipstein Chemical Processes, Inc.

The use of anthraquinone as a scouring or polishing abrasive in dentifrices is suggested. Anthraquinone is the well-known starting material used in the manufacture of alizarin and other dyestuffs.

Broad protection on the idea was obtained as indicated by claim 1:

A dentifrice comprising a supporting paste vehicle and finely divided crystalline anthraquinone uniformly distributed therein.

*U. S. 2,031,169*, issued Feb. 18, 1936 to Gilbert Dillie Laymon.

Laymon applies an oxidation-reduction process in order to remove stains from teeth. Claim 1 indicates the process employed:

Method of removing stains from teeth comprising impregnating the mucin film to a depth at least as great as the objective stain with an iodine solution, and treating the thus impregnated film with a solution of sodium thiosulphate whereby the kinetic as well as the chemical decoloring reaction of the substances is produced in situ in all regions of the objective stain.

*U. S. 2,035,267*, issued March 24, 1936 to Phillip Fleischman, assigned to Louis Schumacher.

The claim indicates the idea and the coverage:

A finely intermixed composition including sodium perborate essential oils, and sodium bicarbonate, the particles of each having a coating of a stearate mixed with the essential oils, and tartaric acid the particles of which have a coating of colloidal clay.

*U. S. 2,035,896*, issued March 31, 1936 to Frank C. Kerwin.

Kerwin suggests the liberation of oxygen from sodium perborate by the use of catalase.

Claim 6 indicates the scope of protection:

A tooth powder composition comprising dry, powdered sodium perborate and a dry, stable powdered catalsae preparation, in such proportions that when the composition is used as a tooth powder and brought into contact with water the catalase will effect rapid and almost instantaneous decomposition of the perborate with liberation of active oxygen therefrom and without formation of objectionable amounts of hydrogen peroxide.

*U. S. 2,041,473*, issued May 19, 1936 to Joseph Janota, Jr., assigned to Victor Chemical Works.

In order to avoid the formation of a curd when toothpowders containing soap and tricalcium phosphate are moistened Janota adds a small proportion of an alkali metal pyrophosphate instead of an excessive amount of soap as heretofore.

Claim 1 is typical:

A dentifrice polishing base comprising a powder of the class consisting of tricalcium phosphate and calcium and magnesium carbonate and a minor proportion of an alkali metal pyrophosphate, the amount of pyrophosphate being markedly less than sufficient to dissolve the calcium or magnesium present.

*U. S. 2,042,359*, issued May 26, 1936 to Earl B. Putt.

Glycol stearate and dimethyl cellulose are used in dentifrices in order to provide a foaming dentifrice which does not have to be alkaline and which does not have to contain alkaline substances in order to produce foaming.


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Claim 1 follows:

A soapless dentifrice comprising dimethyl cellulose as a foam producing ingredient.

To be continued.

## RECENT PATENTS

**2,499,290—Parke, Davis—Penicillin Process.**

**2,499,920—Upjohn—Aryl—Substituted Valeric Acid.**

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## The Antibiotic Vista

*(Continued from page 759)*

*Group IV:*

*Measles, Chickenpox, Mumps, Malaria, Diptheria and Sore Throat*—Available antibiotics have little discernible effect on measles, chicken pox, mumps or malaria. Penicillin given in conjunction with diphtheria antitoxin is believed to be a contributory factor in the current reduction in mortality from this disease. Antibiotics also are effective in most throat infections.

*Group V:*

In *typhoid* and *paratyphoid*, chloromycetin has been of direct benefit in the control of the disease and in reducing complications. Antibiotics have been of increasing value in the treatment of furuncles, skin abscesses and ulcers and in the treatment of some of the cases of sinusitis and in certain types of meningitis.

*Group VI:*

Excellent results are obtained in the treatment of conjunctivitis, and undulant fever. Antibiotics also are of certain value in reducing the initial stages of rheumatic fever.

From the preceding summary and evaluation of antibiotic therapy, it will be seen that the opportunities for future developments in the field of antibiotics could conceivably exceed present accomplishments. It has been estimated that if the gaps in antibiotic effectiveness were filled in, antibiotic usage could easily double or even triple.

It has been my purpose to give you an idea of the magnitude of the tasks that lie before us in the field of antibiotics. The prospects are indeed bright that some day the antibiotics industry will realize its goal of providing to physicians chemotherapeutic agents for the control of practically all infectious diseases. I have indicated enough of the current problems toward which antibiotic research is speedily evolving answers, and as a consequence it is not too optimistic to expect that the search for antibiotics will further the advances in related fields of medical therapy as in cancer and in nutritional diseases.

The antibiotics industry and the medical profession have achieved a degree of organization of scientific teamwork—in research, in production and in clinical application—which has been seldom surpassed. The research scientists have given us the new discoveries, and the production engineers have given us the know-how to mass produce antibiotics of a variety and quality undreamed of a decade ago. It has remained for the

physicians to advance the evaluation and the proper administration of antibiotics in the great war against disease. This cooperative pattern truly exemplifies the potential contribution the American way can make to the betterment of human life.

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## Cold Wave Formulation

*(Continued from page 665)*

the earlier commercial thioglycollates were not all that might have been desired as to quality and purity. Today thioglycollates are made on a good sized commercial scale, and are available in a highly purified form. The manufacturers of thioglycollates have cooperated with the manufacturers of the finished solutions, and standards have been established to insure a uniform and reliable grade of material. Only last year, the Board of Standards of this association, recognizing the growing use of thioglycollates within the industry, set up standards for them.

In addition to the obvious necessity of producing thioglycollates which are free from metallic impurities, and other contaminants, the purification process must be so regulated that various side reaction by-products are not evolved. Some of these, such as dithiodiglycollic acid, thiodiglycollic acid, thioglycollic anhydride, have been individually identified; others have not, although their presence as a group has been determined. For want of more specific designation, they have been referred to as "thio ethers," "acidic impurities," etc. Although, according to clinical and laboratory data assembled by Draize[9] and others, these substances do not in themselves have irritating properties, their presence is objectionable. The thiol complexes referred to apparently have one thing in common. For the most part they have one or more carboxyl groups in their structure, and are acid reacting, and as such, combine with the ammonium hydroxide or other alkalies used in making up a cold waving solution. As a result, the solution requires a far greater concentration of alkali in order to reach a given pH than would be the case were these impurities not present. Therefore, a solution containing an excessive amount of these impurities would of necessity also contain a higher percentage of alkali than normally. It is the higher alkali content which would be directly responsible for irritation rather than the thiol complexes themselves.[10]

It has been a widespread custom, on the part of manufacturers of cold waving preparations, to market so-called creme waving solutions. This is accomplished by adding various types of opacifiers or "Clouds" to the thioglycollate solution. The first requirement of a product of this type is that it does not interfere with the reaction of the waving solution upon the hair. Second, it must be stable and neither decompose nor separate. Third, it must not possess toxic or irritating properties, or an objectionable odor. Fourth, it must be substantially free from metals such as iron, copper or other impurities which are incompatible with thiogly-


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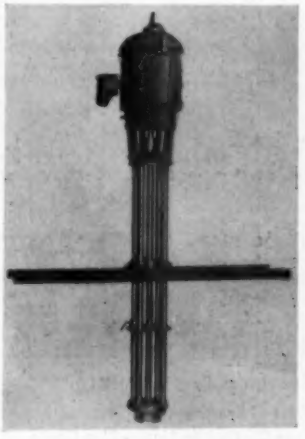

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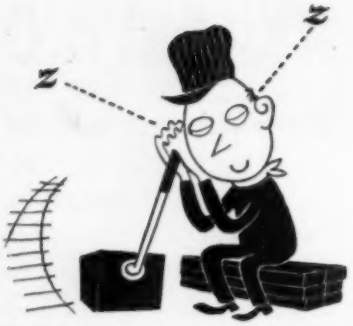

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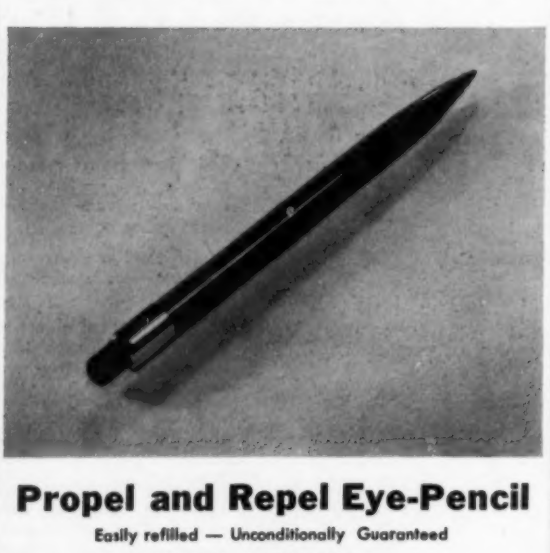

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collates. Wetting agents are sometimes employed in waving solutions, and they too must be tested for stability. Cold wave solutions, like any cosmetic preparation, should be suitably perfumed. Here again, the choice of the perfume oil is a difficult one. One cannot pick and choose just any type of odor, because the aromatic constituents of many perfume compounds are unstable, either to the reducing action of the thioglycollates or the alkalinity of the solution, or both. It is desirable to have the solution pleasantly scented, so that it smells good while in the bottle, while reacting with the hair, and to leave a pleasant, though not too noticeable a residual odor after the reagents are washed from the hair. The coloring of the wave solution presents a parallel problem to the clouding and perfuming stages. With the great variety of certified approved colors at our disposal, there are only a few that stand up in these solutions. Perfume and clouding agents intended for use in cold wave preparations are not only kept free from metallic and other contaminants, but are shipped and stored in specially lined containers in order to keep them in their original state.

**Manufacturing Procedure:** All of the precautions exercised in securing raw materials of high purity would be wasted effort if the solutions were allowed to become contaminated during the manufacturing process. We have indicated that the presence of metals in the concentrated ammonium thioglycollate is objectionable, and, of course, the same holds true for the finished solution. At this point it should be apparent that the production of cold waving solutions requires a somewhat greater degree of care than the general run of cosmetic preparations. It must be remembered that the solutions are extremely sensitive to metal, light and heat, and may be rapidly decomposed by exposure to any of these conditions. It has already been pointed out that the thioglycollates have been used as a reagent for iron. For example, 1 part of iron in 4 million parts of ammonium thioglycollate will turn the solution pink. Copper is also objectionable, since even traces of this metal will catalyze the oxidization of the ammonium thioglycollate. The presence of lead is, of course, just as objectionable here as in all toilet preparations.

From the foregoing, it is quite apparent that the selection of proper equipment, in which to manufacture the solutions, is of equal importance to the selection of the raw material. The mixing vessels should, of course, be of non-metallic construction. Glass-lined tanks may be used, but it can be appreciated that even the smallest flaw the size of a pin point would render the vessel useless. For this reason, large stoneware crocks are preferred by some manufacturers. Stirrers fabricated from aluminum have proved most satisfactory. Cocks and other fittings may be of hard rubber, as well as the feed lines to the filling equipment. Some plastic materials, such as Saran may be used in place of rubber. The reservoirs of the filling machines are coated with rubber or a suitable plastic composition, and the spouts and other contact points are fabricated from 3-16 stainless steel.

A typical manufacturing procedure is somewhat as follows: The concentrated ammonium thioglycollate is titrated iodometrically to determine its exact strength; then a small sample, say, 100 ml. is diluted and titrated with ammonia water to determine how much would be required to reach the desired pH. The ammonium thioglycollate is weighed out and put into the stoneware crock or other mixing vessel. About one-half the required amount of distilled or de-ionized water is added to this, and then the other ingredients, such as perfume, cloud and wetting agent, etc., are slowly added. Then the ammonia water is added until the proper pH is obtained. The balance of the water is then stirred into the solution, and a final pH and thioglycollic acid determination is taken, and corrections are made if necessary by the addition of either ammonia water, ammonium thioglycollate, or water, whichever is required. As a rule, only sufficient solution is made up to provide for one day's filling operation. At the end of a day's run, all equipment is thoroughly flushed with distilled or de-ionized water. The thioglycollate solutions are filled into 3 or 4 ounce bottles, which are kept scrupulously dust free. The closure usually consists of a paraffined cork, and an ordinary screw cap, or a plastic screw cap with a metal free vinylite liner.

Neutralizing solutions also require great care in handling. Twenty volume hydrogen peroxide is used as the basis of some widely used solutions, particularly in the professional field. This is usually put up in 3 or 4 ounce bottles, and is diluted by the operator immediately before using. These solutions will be stable if kept free from dust and other contaminants, and carefully closed. A solution of some mild organic acid such as acetic or citric acid is generally used by the beauty operator, together with the peroxide solution, in order to prevent bleaching. A suitable wetting agent is often incorporated in the acid solution. Another widely used oxidizing agent is potassium bromate, particularly in cold wave preparations intended for home use. This material should be handled with care, and not exposed to intermixture with dust, or friction, when handled in bulk, since it may, under these circumstances, explode spontaneously. Potassium bromate is usually packed in air tight envelopes made from either celloplane, pliofilm, or metal foil. The amount contained therein varies anywhere from 10 grams to a full ounce, depending upon the strength of the waving solution used in the initial step. There are other oxidizing agents which have appeared on the market, such as solutions of sodium bromate, chlorites, chlorates, etc., but they are not as widely used as the first two mentioned. Needless to say, only distilled or de-ionized water is used as a diluent in all formulations.

It is interesting to trace the developments in the cold wave field of so short a span as only nine or ten years. The first solutions, as has been noted, were for professional use only. Shortly after the introduction of cold waving solutions containing thioglycollates in the beauty salons, a cold wave package was offered for home use, but this did not contain thioglycollates in


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any form. The active ingredients consisted of various alkaline sulfites and carbonates. Although this product did not do a very good job, it was the first home wave kit, and a large number were sold. It was followed by the introduction of kits containing thioglycollate solutions, which did a good job, and although distributed nationally, met with rather modest initial success. When modern packaging and merchandising methods were applied to the home kit field, it grew by leaps and bounds. The growth of the home kit coincided with a decrease in the sales of professional waves, and the cry went up that the home kit had ruined the professional cold wave business. Today, however, both are enjoying greater sales then ever before. In fact, recent peak volume sales in the latter field have been credited to the widespread sales of home kits.

**Trends in Formulation:** One of the things we note is that the strength of the solutions being sold for professional use is considerably lower than those first introduced; while the strength of the solutions intended for home use, is considerably greater than those which were initially offered. One explanation may be in the improved quality and uniformity in the thioglycollates being sold to the manufacturers of these preparations. In the early days, if a manufacturer wanted his product to reach the hands of the beauty operator with a thio acid concentration of, say, 7 per cent, with a pH of 9.2, he would put them up at 7.5 per cent with a pH of 9.4. Preparations containing the equivalent of 8 per cent thioglycollic acid were not uncommon, and some went as high as 10 per cent. Today, the average concentration is about 7 per cent. On the other hand, the early producers of home kits were understandably hesitant about putting too concentrated a product into the hands of inexperienced users, and preferred to lean over to the weaker side. One of the first of these assayed only about 3 per cent. Today, solutions in home kits contain as high as 7 per cent thio acid. Another reason for the increased efficiency of all cold waves is, of course, the improvements in the technique and mechanical aspects, both in the beauty salon and in the home.

**Conclusion:** Many reducing agents other than thioglycollates have been tried in the cold waving process. Some give better waves, but are either relatively unstable, or are considerably more toxic; others are absolutely non-toxic and stable, but do not give satisfactory waves. In any event, for the present at least, thioglycollates remain the choice of paractically all of the cold wave manufacturers. One day, no doubt, there will be developed a product which will do a better job. In the immediate future, however, the only foreseeable change in the make-up of cold waving solutions might possibly be in the physical form, rather than its chemical make-up.

**BIBLIOGRAPHY**


1. Mullen—Am. Report. 15, 413, 633, 675 (1926).
2. Stary—Z. Physiol. Chem. 175, 178 (1948).
3. Speakman—Trans. Faraday Soc. 29, 148 (1933).
4. Speakman—J. Soc. Dyers. & Col. 52, 335 (1936).
5. Sookne & Harris—J. Res. Nat'l Bur. Stand. 19, 535 (1937).
6. Geiger, Kobayashi & Harris—Ind. Eng. Chem. 34, 1398 (1942).
7. Phillips—Bioch. J. 32, 837 (1938).
8. Phillips—Bioch. J. 35, 135 (1941), 36, 428 (1942), 38, 25 (1944).
9. Draise—Proc. Scient. Sec. T.G.A. 7 (1947).
10. Private communication.



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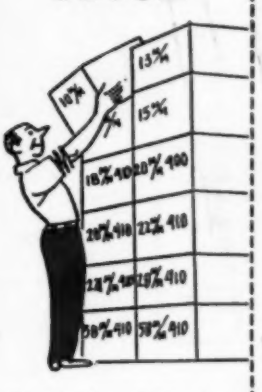

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